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A

Course of Lectures on the
Practice of Medicine

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Volume iii

I must tell you I am not satisfied with merely read-ing my hour – I am desirous to teach, and it is for this reason I have bestowed so much time on Fevers, as being the Fundamental part of our Practice. I am now to proceed to our next of Pyrexiæ.

Ord. II. Phlegmasiæ.

Char. "Pyrexia cum phlegmone vel dolore topico, simul læsa "partis internæ functione; sanguis missus et jam concretus "superficiem coriaceam albam ostendens."

Under name comprehended the diseases which are best known; but at the same time, for want of Order, there is a confusion on this subject in Authors. Dr Traller of Breslaw confounds them with fevers: It is necessary, however, that they be separated from fevers on One hand, and Exanthemata on the other. Different Nosologists have managed this differently. Sauvages separates Fevers from Phlegmasiæ, but under Phlegmasiæ unite Phlegmon with Exanthemata – Linnæus has kept them distinct. Vogel unites them under the general title of Febres. I imagine the best method is to establish a Class of Pyrexiæ, and subdivide it, as I have done, into Febres, Phlegmasiæ, &c. as so many Orders –

Systematics have also distinguished internal from external Inflamations: Thus Sauvages and Vogel have separated Phlegmone from the Phlegmasiæ – Linnæus himself is little more distinct on this, though he says the Prototypus Phlogisticorum est Phlegmone – If he be right in this, other

other Systematics are very wrong. They suppose indeed that Fever does not accompany Phlegmonæ; but this is far from being constant, and even is never the Case, as there is always a topical fever at least. Phlegmasiæ, then, are distinguished from Febres by the words Phlegmone vel dolore topico; which are also sufficient to distinguish them from Exanthemata. I have in the Phlegmasiæ added the state of the blood, notwithstanding De Haens doubts, of which I have said enough before. So much for the Character of the Order. Now for the Genera.

Linnæus and Savauges have also distinguished Phlegmasiæ into Membranaceæ and Parenchymatosæ, according to the nature of the part inflamed. I do not think the distinction well founded, and have, therefore, omitted it. Yet you may see in my disposition of the genera, that I had a view to some particular arrangement. Thus the ~~two~~ genera of of Phlegmone and Ophthalmia come first, as being external Inflamations. Then from the 9th to the 21st Genus we have Inflamations of the Internal parts, especially of the Viscera contained in one or the other of the great cavities. Lastly the 22d and 23d are much alike, being Inflamations of the membranes of the Joints, but very often connected with the Skin.

Gen. VII. Phlegmone.

Char. Pyrexia; partis externæ rubor, calor, et tensio dolens!!

I agree with Linnæus that it is to be considered as the

Prototype of Inflamation, with this advantage, that it is obvious to our sences. There is no external Inflamation in which the Symp-toms that Characterize it, do not take place - Pyrexia, partis externis rubor, calor (I should have added "solito majores, but this is to be understood); tensio dolens. I do not add Tumor, as is com-monly done, because all the Species have it not, as Erythema and Erysipelas.

Let us now enquire into the Proximate Causes of In-flamation. We meet with difficulties in every part of such a work, but here they are not considerable; for there is certainly an encreas-ed Impetus of the blood in the part affected, which easily ex-plains the Phenomena. The Rubor has been explained by an Error loci; i.e. it has been supposed to the entrance of red blood into Vessels that do not contain red blood in their natural state. Dr Haller objects to the possibility of this, and says it is owing to the accumulation of red globules - But it is of no Importance which of the two opinions you take, as both suppose an encreased Impe-tus. With regard to the Calor many questions might arise, but we are not concerned in them, since it is agreed on all hands, that encreased motion produces encreased heat - The increased Impetus distends the Vessels; and this explains the Tension and pain - and therefore I say that the Phenomena of Inflamation may be perfectly well accounted for, by and an increased Impetus of the Blood in the Vessels of the part affected - Perhaps this might be enough for Practice, but all systematics have enquired into the Causes of en-creased Impetus, and we must do the same -

They have said that it depends on a stimulus somewhere applied - It is true, but there are direct and indirect stimuli - Direct stimuli are those that directly, and are supposed by their acri-

-mony

Acrimony excite the action of the muscular Fibres to which they are applied. Every acrid that gives a painful Sensation, will prove a Stimulus to the part where it is applied, and will thus cause Inflamation, if its application be permanent enough. But it is not well proved that such Stimuli occur in internal Inflamation; and hence Indirect Stimuli have been thought of. Bellini, and after him Boerhaave, supposed the Cause of Inflamation to be an Obstruction, which encreased the Velocity of the Blood in the neighbouring vessels; and that this encrease, extending itself to the whole System, would produce Fever. But of late many objections have been brought against that System. Dr Haller refutes it by the following Arguments.

1. The motion of the blood in the extreme vessels is so very slow, that it may easily be retroverted. He appeals to Microscopic observations, wherein he has often seen the red Globules in a retrograde course in obstructed Vessels, and not stopt. Hence he doubts whether Obstruction can ever produce Inflamation. But this Argument is doubtful; the Experiments were made with animals of cool Blood, in which the Circulation is very slow. How it would be in animals of warm blood, is not ascertained.

2. The vessels of Animals are very dilatable, and there is often an Error loci, as when the blood passes through Excretories without inducing Inflamation.

3. Haller, and before him Sauvages, in his Notes on the Hydrostatics of Hales, have proved by Hydraulics that Obstruction will never produce encreased velocity in the neighbouring vessels, but rather diminishes it; and therefore it is not to simple obstruction that the Encreased Impetus is owing. Haller says he has often observed Obstructions, and made Ligatures on large vessels,

and

and that he has never observed any sensible effect from them on the Circulation in the neighbouring vessels - Thus we have an Example in the Ligature on Aneurisms, which produces no sensible effect - It is true that Vanswieten relates an Experiment that he made, by putting a Ligature on the descending Aorta - an accumulation of blood in the upper part ensued, and the animal was soon killed by inflamation - This is not a fair Experiment to apply in Cases of Inflamation, as the vessel was so large - It may be allowed that such would be the case in large vessels that supply half the system; but it doesnot follow that it would be the same in small arteries, where Inflamation takes place - The encreased Impetus may be explained in that Case by the stoppage of the Evacuation of the heart, to which the Aorta descendens is so near - From all this we may conclude, that if Obstruction produces inflamation, it is by a stimulus; and this conclusion is re-concileable to our general doctrine of Encreased Impetus - We say there may be a stimulus applied directly to the part affected, but more commonly it is an Obstruction that proves a stimu-lus - This is proved by the accumulation of blood - The redness, Tension, &c. cannot be explained but on the supposition, that the Vessels of the part dont transmit their fluid so easily as before -

How may Obstruction prove a Stimulus? The dis-tension of the Vessels is the ordinary stimulus to their action; and that being encreased, the action must also be encreased. Some change in the distribution of the blood may cause a change of distension in the vessels of the part, and will encrease their action

action, and the more if there be a Cause of Constriction on the Vessels, the most common Cause of Inflamation - This is particularly illustrated by the Case of Rheumatism, which is commonly owing to cold applied to a particular Joint - But generally is required that, while constriction is thus produced by cold, the vessels be rarified and previously distended by heat; then cold acts, specially in producing Rheumatism. We know that it is thus principally that Cold produces Inflamation - If you inquire into histories of such Cases, you will always find this true - But whether it be distention or constriction that produces Inflamation, I say is indifferent; for if from old Rheumatism, strains, or any cause the parts have acquired an unusual rigidity, the application of warmth will induce Inflamation - We may always account for Phlegmone from circumstances of over-distension, concurring with Constriction, chiefly arising from Cold - This is also the case in internal Inflamations, as Angina, and Inflamations of the Thorax. Thus do we account for Inflamation in general, without excluding, however, the possibility of direct stimuli. But a great part of our doctrine still remains.

That circumstance of Obstruction proving a stimulus, depends chiefly on this, that over-distension of the extreme Vessels induces a Spasm. I conclude from hence, that most Phlegmasiæ are attended with fever and cold fit. Every Argument I brought concerning Fevers, may be ~~travught~~ brought here, and therefore Nature, endeavouring to procure a reaction and overcome the Spasm, induces an encreased action. From that general Analogy in Fevers, I endeavour to explain, in the same manner

manner, the Spasm in Inflamation – I have here entirely avoid-ed the supposition admitted in the old schools of Physic, that Obstructions depends on a Lentor of the blood. This is merely Hypothetical – The only proof they bring of it, viz. the Inflammatory crust, is fallacious – Nothing is now more certainly known than that it is a natural appearance, and a constituent part of our fluids – They suppose it encreased in quantity, but there is no proof of this, and so far as we can judge of it, it is the effect rather than the Cause of Inflamation – Thus, if we bleed a person today who is to have Inflamation tomorrow, we find none of this appearance – If we thought it necessary, we could use many other Arguments against this Doctrine. Thus that Van Swieten alledges concerning fevers, may be applied here – How does that Lentor produce only a topical Obstruction? It should occupy all the extreme Vessels; but how improper would be such an assertion, I leave you to consider. But if Phlegmasiæ agree so well with fever, what is the difference of their Proximate Causes? The topical affection which, in Phlegmasiæ, encreases the Tone of the arterial system in the part affected, and is readily propagated through the whole: Whence the Phlogistic Diathesis – But of this more particularly on Monday.

I have attempted the Theory of Inflamation – Perhaps it is one that was best understood formerly, but it still wants a number of additions in many respects – What I have de-livered is, I hope, clear; but I will repeat the heads of it, as it may be done in few words –

1.

1. An Inflamation manifestly consists in an encreased Impe-tus of the blood in the Vessels of the part affected. As this is often purely topical, it consists in encreased action of the ves-sels of the part; and there is no more certain proof of the muscu-lar power of the arteries, than of Inflamation being topical. This being established; What is the Cause of the encreased action, and consequently of the encreased Impetus? It must depend on a stimulus: and this may arise either from an acrid substance directly applied, or from unusual distension of the vessels of the part - It is not often that we can distinctly conceive the application of the first, especially in internal Inflamations; and therefore we must suppose the unusual distension to be a much more frequent Cause - This must depend either on an unusual quantity of fluids distributed to the Vessels of the part affected (whence some degree of accumulation arises before the fluids can be transmitted), or from a Resistance to their passage. This Resistance, again, may arise either from the Viscidity of the fluids making Obstruction, or from any Constriction or Compression on the Vessels by external Causes - at our last meeting, I touched on the Doctrine of Inflamatory Lentor - If you look into Boerhaave, who has clearly given that System, you will find many Causes that may induce such obstructions; but many of them are merely hypo-thetical. I would not deny that there are viscid Obstructions, but I say they are rare Occurrences - Therefore the Con-striction is probably a more frequent Cause, and at the same time is more evident; and indeed many Inflamations are

are plainly owing to the the Concurrence of these Causes, i.e. are owing to an unusual increased derivation, concurring with some power constricting the Vessels at the same time, as in Angina and Rheumatism. But still there are difficulties, brought chiefly by Haller, that are not obviated, such as the frequent anastomosing of Vessels, which prevents accu-mulation and Obstruction, and transmit the unusual quantity. Therefore we say that it is a certain Circumstance of distension that produces Spasm; that this is communicated to the System, and ushers in Inflamation by a cold fit; and that it is the means Nature, or rather Œconomy, em-ploys where any resistence is to be overcome, that pro-perly causes the increased Impetus.

From this we understand in what Fevers and Phlegmasiæ agree, as Orders of the same Class. The dif-ference of these two orders is, that the pyrexia in Phleg-masiæ depends on topical affection increasing the Tone of the Vessels of the Part, which increased Tone is readily communicated to the Vessels of the Whole System. Therefore Phlegmasiæ differ from fevers chiefly by the Diathesis Phlogistica. I hope you all understand the difference of this Vis insita and the Vis nervosa; though they can be intimately connected together, yet they may be consider-ed separately as distinct. That Spasm often arises from the Vis insita alone, is undeniable; and that the Vis nervosa may act also with the greater force, when the Vis insita is

is encreased. It is this encrease of the Vis insita that we call Diathesis Phlogistica. In consequence of this a disposition to Phlegmasia arises. Qui acidum eructant, say Hippocrates, raro Pleuritici fiunt. The Vis insita of muscular fibres manifestly depends on their tension; and therefore persons of tense fibres are more predisposed to Phlegmasia – Moreover, Cold causes such a constriction on the Vessels as gives also such a Diathesis Phlogistica and Predisposition. That Cold acts as an astringent and Stimulant, we have already seen, and therefore can perceive how it produces an encreased Tone of the Vessels. Tonic Medicines may, perhaps, be also ranged under the same head. But in the next place Diathesis Phlogistica is known by the Symptoms, and chiefly by the hardness of the Pulse; which manifestly shows a Tension of the Arteries – By its Cure, viz. bleeding, which seems to operate rather by inducing a sudden relaxation of the arterial System than by diminishing the quantity. If you take notice of the Vis derivationis of Haller, you will find that nothing can explain the Phenomenon of the Fluids all rushing to a wounded part, but the encreased Incision of the Vessels. It is sufficiently evident that Phlogistic Diathesis does not depend on the state of the fluids, but on encreased Vis insita of the Arteries themselves – Though I have said that the affection is often topical, yet frequently we find it readily communicated to a considerable extent. A Thorn under the Nail will often

often excite Inflamation of the whole Arm, and even of the shoulder and neck:- and we find the communication is in proportion to the sensibility of the part where the Stimulus is applied, and not to the number of Vessels primarily affected. There are phenomena which prove that the Nervous System may make that communication to some parts rather than to others - Morgagni mentions a particular Case of an In-flamation of one side of the Lungs only, in which he found a Phrenitis supervening, which affected only the same side, leaving the other quite free of Inflamation - This was after-wards seen by Dissection. How is this to be explained? Morgagni asks whether it might not be owing to a compres-sion of the Subclavian Vein by the Inflamation of the Lungs - But as in many other Cases there is such a Commu-nication without the least supposition of a change in the distribution of the fluids, that communication must be performed by the nervous System. The chief difference then between Phlegmasia and Fevers is the Diathesis Phlogistica, or the encrease of the Vis insita in Inflamations; whereas in Fevers it is more properly the Vis nervea that is in-creased - In pure phlegmasia there are seldom those Symp-toms of Putrescency and Debility, so common in fevers: Whereas fevers depend so commonly on Contagion, it is only when Inflamations are Symptomatic that they are conta-gious.

Having now explained the first stage of Inflama-tions, we must observe that they are attended with various effects that are to be considered here, as they make a part of

of the same disease, and never happens without some previ-
-ous Inflamation. Our Nosologists have separated Abscess
and Gangrene from Inflamation, and ranged them under
different Class: a fault liable to produce confusion -
All these diseases I have marked in the Synopsis as
Sequelæ, are not only, not of different Class from the
Genus to which they are annexed, but are not even of dif
-ferent Genera - They are effects of that genus only -
If the resistance occurring in the Vessels of the part, whether
depending on Obstruction or Spasm, is such as yield en
-tirely to the following encreased Impetus, the consequence
will be, that the fluids will pass on with their usual
facility, the Distension will cease, and the Circulation
in that part return to its usual train; in short, the
Inflamation is at an end, and is said to be terminated by
Resolution. This is but rarely the case -

More commonly there is an Effusion of fluids
under the Cellular Substance. We might indeed ima
-gine the Tumor owing to the accumulation of fluids,
still confined in their vessels. But this will not account
for the large tumor so often arising in Inflamation - We
know there is always an Exhalation of fluids into the
Cellular Substance; and this, by the encreased impetus,
will be much encreased - Cases have been seen where
and actual Effusion was found to take place. If
this effusion were only an encreased Exhalation, as
all exhaled fluids may be reabsorbed, there would also
be

be reabsorbed, and the part return to its natural state. There is another termination of Inflamation, but we can perceive that the matter effused may be less apt to be reabsorbed, and more liable to a longer stagnation - and if any stagnant fluids are liable to change, in these cases it may also take place; hence what we call a Suppuration. This has formerly appeared very mysterious, but now it is agreed that it is a very simple effect of Inflamation. Boerhaave and Grosprieste, and Quesnay, have been erroneous in their account of this subject, and their explanation is inade-quate to the Phenomena - It would be needless here to enter into a criticism of their Opinions. Pringle had occasion to observe that the serum, in Consequence of stagnation, was in part changed into pus, and this is confirmed by the Experiments of Gaber of Turin, who found that the most sound human body gave; by separation, a fluid extremely similar to Pus - It is now, therefore, a-greed that Pus is a spontaneous change in consequence of stagnation. From Gabers Experiments it seems to be chiefly the Coagulable Lymph, or in other words, the Gluten of the blood dissolved in the Serum, that undergoes this Change; which is also the Opinion of Pringle. The Pus is produced in Consequence of Putrefaction, and when examined is found to contain all the qualities of the Glu-ten. The whole of the Serum is not thus converted into Pus, but only about a third part of it, two thirds still floating on the Surface. This, in the formation of Pus, we suppose is reabsorbed - at the same time I cannot say that it is only the coagulable part that is formed into

Pus

Pus, because the Inflamatory Crust could never be converted into Pus - Probably Gluten dissolved in Serum, or rather mixed with a portion of Serosity, is the matter that forms Pus. From this account we may derive this Consequence, that the formation of Pus depends entirely on the Effusion - We have reason to believe that the Exhalation is Serum, more or less impregnated with Gluten, and therefore more or less disposed to be reabsorbed, or, by Stagnation, to be changed to Pus. The degree of Impetus being given, the Exhalation may be more or less considerable:- and again the free communication of the Vessels with the Cellular Texture, is requisite to the formation of Pus. In Ligaments there is often a Tumor in Consequence of Inflamation, but probably arising from a fluid fit to be absorb - That ~~Exhalation~~ depends encreased Impetus, appears,

1. From the Pulsation of the Arteries.
2. From the degree of Horror that accompanies it.

We have endeavoured to explain the essential and fundamental parts of Inflamation, and proceeded to its various Terminations.

1. Where Inflamation ceases without further effect, or when there is a total reabsorption of the fluids effused, it is called Resolution. Many subtile questions might arise here, but they are too subtile and inapplicable.

2. In Consequence of the effusion into the Cellular Texture, if the matter effused be not totally reabsorbed, but changed

into

into pus, it is called *Suppuration*, another frequent termina-tion of Inflamation. Its Theory is attended with great dif-ficulties, and considerable errors have been made in it, but is now more clearly understood — We know from the Ex-periments of Pringle and Gaber, that a certain part of our fluids, by Stagnation and heat, is liable to be changed to Pus; but probably there is here a species of fermentation, with considerable generation of air. Gaber tells us that if those fluids are included in Vessels hermetically sealed, the extrica-tion of air is often sufficient to break them. It appears by these Experiments that that fluid is formed by the serous effusion, and more specially by the Coagulable Lymph being dissolved in it, but mixt with a certain portion of Serosity — It seems that it is this alone that changes pus, for other Parts are not fitted for this change — Gaber found the red Globules, mixt with the Serosity, gave rise also to a fermentation; but of a more putrid kind — Bile and other human fluids tried in that way disturbed the fer-mentation. Suppuration, then, depends on effusion or encreased Exhalation — If exhaled fluids do not change to pus, it is probably because they are not sufficiently impreg-nated with Gluten, and therefore not so fit to be changed to Pus, and may suffer a much longer Stagnation, as in Ascites and many other Dropsies — The greater pro-portion of Gluten, which is required for suppuration, is given by the encreased impetus — The Horror that at-tends suppuration is a general Mark of an Effort of Nature.

The

The Vessels must also be so situated as to effuse their fluids into the Cellular Texture. This is explained by wounds, which, after the opening Vessels have effused some of their fluids and are closed again, shew not Pus till a new Inflammati-on appears in the Wound: If the Impetus be diminished, the Effusion is changed and the suppuration disturbed.

The state of Effusion in Abscesses may be different. It may be induced by Anastomosis, the exhaling Vessels being more dilated — But in many Cases, more probably it is produced by rupture of the Vessels — We very universally find the Texture of the Parts more or less destroyed. This is partly owing to Erosion by Pus already formed, but is not entirely to be imputed to it, but rather to a rupture of the Vessels — It has been questioned whether Pus appears in any Case, but in Consequence of Rupture and Erosion of the Vessels — If we consider wounds or Ulcers, we shall be readily disposed to answer, no: and this is the general Opinion — But De Haen not only says, Yes, but even says that Pus may be produced in Circulating fluids, even in their proper Vessels. This is improbable

1. Suppuration seems to depend on the stagnation of effused Fluids.

2. The Change of Serum into Pus is certainly performed by Fermentation; but it is a very universal fact, that fermen-tation is never regularly performed but in stagnating fluids.

3. It is necessary for suppuration, that the portion of the fluids which is to be changed into Pus, should be separate by itself; for the mixture of other parts disturbs the pro-cess. But may it not be produced without Erosion or

Rup

Rupture? If Effusion be produced, as we conceive it may be, without Rupture or Erosion, suppuration may take Place in Consequence. And we know in Inflama-tions of Internal Viscera, there is an exsudation extreme-ly similar to Pus. The halitus is much encreased and less Purulent. Though Ascites, Dropsies, &c. produce an Exhala-tion not purulent, yet when we examine the Viscera we find them covered with a Purulent Exudation, and on this account Gaber distinguishes two species of Suppuration - But I have seen examples of Ascitic Effusions quite pu-rulent, without any Symptoms of Rupture or erosion, and the Patient was perfectly recovered - Here I would agree to the first part of DeHaens proposition, that Pus may be pro-duced without Rupture or Erosion. The fact which he conclud-ed from chiefly for the whole of his opinion, is not satis-factory, Viz. That Pus has often been coughed up without the least appearance of Rupture, Erosion, or Vomica. The Pus may have been found in the Bronchia, where the matter had been effused.

This is the substance of my Doctrine of Suppura-tion, well explained by wounds and Ulcers - Mr Quesnay has distinguished Abscesses and wounds with regard to their suppuration, as the first depends on Inflamation and the last not - But I say the suppuration of Wounds is evidently inflamatory; for without Inflamation no suppuration takes place. And the means employed by Surgeons to pro-mote suppuration may be explained from their inducing Inflamation - In Inflamation you may see a very great variety of Effused matter, which may change the nature of the Pus. If red Globules are mixt with it, it is more

pu

Putrid. The mixture of Bile, deficiency of Absorption, and the greater or less Effusion in consequence of the different Tone of the Vessels, may also induce a variety in the Suppuration. This leads me to

Gangrene, where there is a great Putrescency of the parts. We may suppose it depends,

1. On much encreased Impetus, and gross effusion of fluids more disposed to Putrefaction. But,

2. Loss of Tone has the greatest share in Gangrene; for the means of destroying the Tone promote Gangrene, as Cold, long continued use of Narcotics, &c.

3. Gangrene is often a termination of Palsies, when the loss of Tone is communicated to the arteries, and thereby a Stagnation produced.

4. External Compression, or other Causes may, by inducing a stagnation of the fluids in their proper Vessels, most certainly occasion Gangrene. This stagnation is probably a more common cause, but it may be produced by Effusion. I would refer Gangrene, then, chiefly to a want of Tone, which may be destroyed Effusion or Stagnation, and perhaps by encreased Impetus. We know that encreased Excitement often brings on Collapse. The red Globules are chiefly liable to tend to Gangrene. We indeed often see red Globules effused, as in Ecchymosis, without gangrene. But this may be explained by the total absorption, or want of encreased heat. If the fluids are effused and re-absorbed, there is no Gangrene; but it arises chiefly

When

when they are tainted with a putrid ferment, that des-troys the Tone of the Vessels - This is the Case of Gangrenes of internal Viscera, in Consequence of Putrid fevers. The difference between this & Sphacelus we have seen - Gangrene does not give a vapour that affects the whole mass - Sphacelus is a higher degree of putrefaction; whence such Vapours arise. These three Terminations of Inflamation are, perhaps, properly speaking, the only; but Authors add another, Viz. Scirrhus, the Theory of which is very obscure. This Termination is supposed to affect chiefly glandular parts, and so far it is not so frequent a Termination of Inflamation; nay, Scirrhus commonly arises without Inflamation, from Stagnation - From this I would suspect, that even when it happens after Inflamation, it is rather in Consequence of a Concurrence of other Causes. But I cannot enter more deeply into this Question, as this Termination is very obscure, and of little Consequence here.

But there is still another Termination of Inflamation, which has been omitted by Authors. I have mentioned effusions, and chiefly of red Globules - I have mentioned Ecchymosis with Reabsorption - But the Effusion of red globules may be so considerable as to destroy the functions of the part before there is time for gangrene to be produced. This is often the Case in Peripneumony, where one of the most fatal Issues of the disease is a Suffocation, in Consequence of Effusion; and accordingly on dissection the Lungs have been found a Liver-like mass, sinking in water, and giving all the appearances of such an effusion. This finishes our general Doctrine of Inflamation.

after

After having explained the different stages of Inflammation, we are now better enabled to consider its genera and Species – and with a view to this I say, they are to be distinguished chiefly by the part affected, as this is distinguished by its structure of its functions – This is the foundation of my arrangement, the external Inflamations preceding those of the internal Viscera; and then those of the Membranes, Muscles, or Joints – As the Protypus of Inflamation is Phlegmone, we shall consider this chiefly; and we have placed it first – Though Opthalmia is also an external Inflamation, yet it is easily distinguished from Phlegmone, by the part affected – I see here a piece of nosological inaccuracy, when I say that Phlegmone is an Inflamation of the skin; for all the Species enumerated are not inflamations of the skin, such as Parulis, anthrace, &c. This was owing to my having in view only the external appearances of Inflamation – But taking Phlegmone as it generally is, there are two Species of it at all times distinguished, Viz. the Phlegmone and Erysipelas. Phlegmone is indeed a Generic Term comprehending both, and we must have a new word either for the genus or for one of the Species – For this reason I omit Tumor in the Definition, which is only proper to the Species Phlegmone – This differs from Erysipelas, as you may see in our 24th Genus, "In cutis aliqua "parte, saepius in facie". By these words I do not mean at all that Erysipelas is confined to the Skin; at least this is a great dispute – Rubor roseus a Colore pallido et rubro mixtus – The Antients, who sometimes, but rarely, observed red Streaks, ascribed this Symptom and

and the whole disease to an effusion of Bile, which they much insisted on. Pressu evanescens nec mox rediens, or Pressu dissimulanda — Diffusus. This is not a very accurate Word; it implies that Erysipelas occupies a very large Extent - This indeed is generally the Case; but to be accurate, we should say extensive in comparison of the small de-gree of Tumor - Ambitu inequalis; because its limits are not very distinct - &c. Now look into the Definitions of other Systems - Sauvages distinguishes Erythema from Erysipelas by the fever attending the Latter. "Tumor sine febre, superficiarius." I have admitted this, because it does not readily appear, though we conclude it so from reasoning - Solitarius, to distinguish it from Exanthemata - Diffu-sus, rubro-roseus This last is an embarrassed Expression, implying a deeper colour than roseus, which would have been sufficient - Properly, neither of these words are accurate, because this is not universal, as many Erysipelata turn to a deep red colour - Linnaeus considers Erysipelas and Erythema as the same - Macula, to express the solitarius of Sauvages, is by no means proper; for no one every applied the Term to an extent of more than four Inches diameter. Rubescens is inaccurate - Ardens not constantly present, and rather more pruriens than ardens in most Cases - Tumidi-uscula. If there be an elevation it is indeed very small, but Tumor is not at all universal - Superficialis, dilatabilis - The last answers to our, in vicinam cutem serpens, simul prius occupatam deserens - Desquamatione finienda - This is not at all complete - Vogel is extremely short in his

his definition - Gen. 343. Inflamatio lata Cutis, quæ splen-det et leviter ac æqualiter tumet. The Splendor is not constant; nor does he tell us what he means by Inflamation.

But how is Erysipelas distinguished from Phlegmone? I have no where given a definition of this, because Phlegmone is a generic name - Savauges has defined it, Gen. 52 - Tumor - This is proper, it being constant - Spheroideus, not exact - Rubore, Calore, Tensione, dolore pulsatili insignis - This last is applicable only to such Species as tend to suppuration, and hardly remarkable in others - Sponte in suppurationem vergens, but this is not universal, as many end in Resolution - Linnæus in Gen. 39. call Phlegmone as we do Inflamatio partis externæ, but he puts in a separate order from other Phlogistici, under the Title of Musculosi - For what reason I know not; for Phlegmone is not proper to muscular Fibres - Tumor Pulsationis, is improper, as is also the definition of Inflamatio, Gen. 231. - Vogel defining Phlegmone, Gen. 351. says. "Tumor dolens, et saltem Ovi gallinacei magnitudine." This is to distinguish it from Furunculus - But this may exceed the Ovum Columbinum, and the Phlegmone be less than the Ovum Gallinaceum - The best definition of Phlegmone will be made, I think, by taking the opposite Character to Erysipelas, and keeping the generic ones - It is more red, not pressu evanescens, nor diffusus, and frequently ends in suppuration - Hence we may deduce the following consequences. 1. From their being no Tumor in Erysipelas, we say, that those are chiefly affected which are incapable of accumulation

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or Effusion, not communicating with the Cellular substance under the Skin.

2. The Vessels affected in Erysipelas not being dilatable, cannot pour out a matter fit to be changed to Pus, though they may pour out some Serum - But it is not clear that the extreme Vessels of the Skin cannot ever pour out such a purulent matter, because they do it in the Small Pox - We must then look for another Cause - We find, that in these superficial Suppurations, the matter poured out has always some tendency to Putrify; and therefore we find there is always some degree of Gangrene - On the other hand there may be doubt, whether the small Vessels do not pour the purulent matter from the great Vessels being affected with a general stimulus. Thus acrid Blisters, as Sinapi &c. if continued, will produce Pus - A common Cause of Blister is Burning, which, if superficial, produces a serous Blister only: if it goes deeper it is purulent - There seems to be a peculiarity in the matter of Erysipelas, because of its arising so often as an Exanthema in Consequence of fever.

With regard to the other parts of Phlegmone, it is sufficiently distinguished by its being a tumor, which shews that the Vessels affected are capable of considerable Effusion. and a Tumor is circumscribed, which shews a topical affection - With these distinctions, Erysipelas may arise from various acrid Stimuli - In some Cases they produce something more, but frequently not. The Pernio, and anthrax are only varieties of it - There may be Phlegmone attended with more suppuration, more especially if arising from a stimulus or deposition of a particular matter - A Suppuration

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is always a means which Nature employs to throw out Extraneous Bodies. This is the Case in the Furunculus or Boil, which always terminates in suppuration, but is chiefly distinguished by Sarge-ons by its Nucleus, while suppuration is going on around it, and which at last is thrown out in that State. This is properly Observed by Sauvages, Gen 18. - Vogel improperly distinguishes it from Phlegmone by its Size - the proper distinction Furun-culus will depend on this, that Phlegmone and Erysipelas are frequently combined together - Under the Names among authors of Phlegmono, or Erysipelas, or more properly Erysipelatod; Phlegmone Furunculus is often a Tumor of this kind - Funda-mentally a Phlegmone is seated under the Skin, but is often at-tended with Erysipelas, and in that case forms the anthrax. Furunculo-Erysipelas is distinguished by the Extreme tender-ness of the Skin, as you may see in the Descriptions of anthrax, though this Name be more properly applied to the Pestis. As for Achor, of which Crusta lactea is a variety, and other species, I beg leave to omitt them, as they are very obscure, and forreign to my present purpose, belonging rather to the Morbi Locales. Therefore I shall here put an end to my criticism; and tomorrow enter upon the general Cure of Inflamations -

The Cure of Inflamation is always to be at-tempted, first, by Resolution: This is the shortest, most desirable, and safest way. Suppuration is almost as fa-tal in Internal Inflamation as Gangrene. There are Two Indications.

1. To diminish the encreased Impetus, as in fevers.

2. To remove the Obstruction, or Spasm (as you please) of the part affected.

The first Indication is absolutely necessary (since we have seen that Inflamation depends on encreased Impetus), to prevent all other Terminations than Resolution: to produce which, it is most certainly proper - We often take off Spasm by diminishing the encreased Impetus only; but how, is difficult to say - On the subject of Fever, I said that Spasm often depends on a Diathesis Phlogistica - It is easy to see how the same over-distension which produces Spasm, may continue it - But we must take this as a fact, that by diminishing the Impetus, we often take of Spasm - I have often seen the disease entirely removed by Venesection - In short there is no Rule more general, than that the chief remedy in Inflamation is to diminish the Impetus - We have before said that this is to be done -

1. By the Antiphlogistic Regimen. With regard to fevers I mentioned some doubts concerning its universal propriety; but there are none in Inflamation - I have considered Cold as a part of the Antiphlogistic Regimen, but it must be cautiously applied in Inflamations, as it produces a Diathesis Phlogistica - yet it must be applied to a degree sufficient to prevent heat, and preserve the due Temperature of the System. Nay, in some Instances, where the force of the System is well supported, we may apply it to a degree far below 62 without inducing Phlogistic Diathesis - and in many Cases it is more useful in preventing heat than it can be hurtful in keeping up the Spasm - Yet, though with Sydenham I would admit a

a free access to the external air, & would, with other Practitioners, prohibit Cold Drink.

2. Bloodletting is very universally applicable, and is necessary, as the chief Remedy in Inflamation — I have said enough on the Circumstances to be considered concerning it. There is still a Question remaining as to the Quantity to be drawn — Being the chief Remedy, we are very liable to push it beyond due limits, as has chiefly been the Case in France for these 100 years, and perhaps with our Physicians too — But I think there should be some limits — We must observe that a certain quantity of blood drawn will kill the Patient — It is true that the Vein we commonly open does not give blood enough to produce this effect; but it is the intervention of syncope that pre-vents it — and though it cannot be done at once, yet by repeating the Operation we may push it to Death. I knew a case of a man of the first Rank in this Country who was killed by the repeated Bleedings of a wrong-head-ed Physician, where there was no occasion for it, a fatal syncope coming on during the last operation — Besides it is certain that bleeding may so destroy the Tone of the System, and alter the Consistence of the fluids, as to oc-casion fatal Effusions, as inveterate Dropsies — There is a part of our fluids, as the red Globules, that can-not enter into the small Vessels, to which the pre-servation of the tone of the System is chiefly owing. It is therefore obvious, that if we bleed too far, the Tone of the system will be destroyed, and the fluids altered in Consistence — When the repetition of Bleeding is ne-cessa

necessary, though on the one hand, the Intervals should be short that time may not be allowed for the producti-on of red Globules; yet on the other, long intervals may be useful on that account, for keeping up the Tone of the Sys-tem. In Pleuritis and Peripneumonia large bleedings may produce considerable Effusions, so as to destroy the Functions of the Part, of which Morgagni gives many instances - Besides, Bleeding may occasion dangerous Relapses; therefore it is necessary to assign some Limits to it. How far we should here be influenced by the Cir-cumstances, I have said on the subject of fevers; and this gives us great difficulties as to the exact measure to be drawn - But a Pound at once is generally to be considered as large bleeding - Two pounds in 24 hours is also a large evacuation - Three pounds in two days begins to be dangerous - But any thing above four pounds in two days is extremely hazardous: though this must vary ac-cording to Circumstances, which must be left to the discre-tion of the Physician - But a person who cannot bear the loss of two pounds the two first days, will perhaps bear it after repetition; and on this footing we may explain the great hemorrhages some Persons have suffered - though in such Cases there is a fallacy; for the proportion of red blood is often very small there - Besides, if the intervals be long enough to give time for the renewal of red glo-bules, this will be sufficient to take of the danger - Phy-sicians have spoken much of the Limits of Bleeding in Inflamations - Dr Boerhaave insinuated, and Haller says more

more plainly, that we should stop on the fourth day, as the suppuration is then to take place - But from the Doctrine of Suppuration, and from Gabers Experiments, it appears (vid. Clockoff de Termino Venæ Sectionis in morbis acutis), that this varies extremely, according to the circumstances, the state of the Air, and the degree of Effusion and absorption - There are Phlegmasiæ that have suppurated in 24 hours after their first appearance - and there are instances of Pleu-ritis and Peripneumonia that have run on to the 7th 9th and even the 11th day, and then admitted of Resolution - But if the Symptoms Indicating Bleeding subsist still, even when suppuration begins to take place, I imagine Bleeding may be useful, to determine the suppuration not to be gangre-nous -

3. Topical Bleeding will often supercede the necessity of general Bleeding - Much has been said in favour of Ar-teriotomy, which I consider as topical bleeding, though often employed as a general one. But I suspect that Venæsection is more capable of relaxing the System, unless large Arteries are opened; which is inconvenient and dangerous; - The blood is drawn slower that way than by Venæsection - Besides in this we have the advantage of sudden Relaxation, after going to Deliquium when the Ligature is suddenly removed - Other means of topical bleeding are Cupping, Scarification, and Leeches - For want of Dextrous Surgeons we commonly have recourse to Leeches in preference to the two first; but Leeches are not so useful, being slower, and dangerous, as we cannot measure the quantity drawn - In Opthalmia we generally employ Leeches, but I dare say that Cup-ping

Cupping and Scarifying around the Eye would be much more useful.

3. Purging. Of this I have spoken sufficiently in Fevers. I had even occasion to touch upon it in Inflamations - It may be useful, but is inferiour to Venesection. Therefore I would conclude that it is hardly to be pushed farther than as a part of the Antiphlogistic Regimen - In Cases of Angi-na, Opthalmia and Phrenitis it may, however, be more allowable, as producing a Revulsion.

4. Refrigerants may with propriety be employed - Acids and Nitres are useful in all cases of Inflamation, pro-vided they do not irritate the affected part, as in Pulmonic affections, where they may be hurtful by inducing Cough. How far are Refrigerants useful in external Inflama-tions? The antients frequently employed them; but they have been found to destroy the Tone of the Vessels and occasion Gangrene; therefore they have been generally rejected - But I would alledge, that generally and Theoretical-ly, there may be many intermediate degrees between the Effect of Refrigerants, as diminishing the Tone and as destroying it - If we could hit on the proper medium between them, they might be useful - Of late we have much em-ployed the Sacch. Saturn. which was formerly particular-ly avoided by Surgeons - M. Goulard is the chief restorer of that practice, and I have seen it useful in external In-flamations - In most of them, then, except the Erysipelas, they may be employed with advantage - Narcotics and Opiates are Refrigerants of another kind, sometimes useful in

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external Inflamations; but on account of their uncertainty it will be better to omit them.

Our second general Indication in the Cure of Inflamation is, To remove the Spasm; which is to be done
1. By warm Bathing.
2. Blisters or Rubrofacientia.
3. Antispasmodics.
4. Emetics.

I thought proper to deliver the general Cure of Inflamations in this place; but it cannot be fully understood till we come to particular Inflamations, which give rise to great diversity. Our first Indication, Viz. to diminish the Impetus of the Blood, we have considered. The second is, to take off the Obstruction, or to speak more particularly, the Spasm, that was the original Stimulus and the Cause of the encreased Impetus — Subtile disquisitions are here unnecessary; and upon every Theory the application of the following Remedies will be proper.

1. Warm Bathing, in the form of Fomentation, Bath, or Poultice, as it combines humidity with heat, is the most powerful Emollient we know — How well it may contribute to remove the Spasm, is obvious — Its efficacy directs us to employ it in External Inflamations; and the antients depended much on its relaxing power in internal ones — It is rare that Surgeons employ water alone — almost all Writers use many Impregnations, but water alone, or milk and water give all the Effects of Emollients — I just said that the effects de

depend on the Combination of warmth and moisture, under the form of fomentation, Bath or Poultice - If the warmth is chiefly required, Fomentation is the best; if Moisture, the Bath, or the Poultice still sofer- Such applications are very universally proper, except

A. In Inflamations of a more or less Erysipelatous kind, where moisture would be hurtful. (But more of this when we come to speak of Exanthemata. Now I mean to speak of the applications chiefly to Cases of Phlegmone)

B. When we can perceive that the Inflamation is supported by the Laxity of the part, admitting a greater afflux, as is sometime the Case in Ophthalmia.

Γ. When it may be suspected that heat, by its Stimulus and by rarifying the blood ~~may~~ do more hurt, than good by its relaxing power - It is a fact, that in the beginning of all Inflamations, the application of warmth is hurtful - With these exceptions warm bathing is universally useful.

2. Rubefacientia or Blisters. I have before considered the Operation of Blisters, even in Inflamatory Cases - They have been considered as Stimulants and Evacuants; but they are more particularly fitted to remove Spasm - Blisters are never to be applied to the part affected, but on a subjacent part, as near as possible - Whether they be useful in general Inflamations, or when applied at a distance in topical ones, we have already considered - They are especially useful when applied near the part affected, or when the Inflamation is fixt, as in Pleuritis and Angina, &c.

But

But when the Inflamation is shifting, and depends on general Phlogistic Diathesis, Blisters are useless, inconvenient, and often attended with danger, as in Rheumatism, where they are proper only when the pain is fixt - This is known from the long duration of pain, and its approach to Chronic Rheumatism - as for the application of the Rubefacientia, though they are without Evacuation, their effects are nearly the same as those of Blisters - In all Cases where the Inflamation is fixt, where the Rheumatism, for Example, is like to fix on one part so as to become chronic, Rubefacientia are preferable to Blisters of Cantharides, because they are not so transitory; and if continued will protract the purulent discharge longer - Issues or Setons are analogous to them, but are not so fitted to remove suddenly a particular Inflamation - I have, however, known Odontalgia, which could not be removed by Blisters behind the Ears (perhaps because of their small size), effectually removed by an Issue in the Arm, or by Rubefacientia: But I should imagine in that Case, the effect to have been rather Prophilactic than Curatory.

3. Antispasmodics. These are still more doubtful here than in fevers - Few are imployed internally, except Opiates, which are recommended by our Experience of their good effects in Rheumatism - As to external Antispasmodics, it has been very common to impregnate Fomentations with Remidies called Discutients, a term too vague to be well understood, or Resolvents, a denomination more determined, but founded on mere Hypothesis - There is no proof of a Lentor here, & if there were

were, the remedies employed to Resolve it would be insuffici-ent, as they are chiefly Aromatics, which would rather tend to confirm the Lentor - If they be found useful, we must them to be antispasmodics - But they are generally prepared by Decoction, by which the Volatile parts, on which the anti-spasmodic power chiefly depends, are principally dissipated. From whence I would conclude that even their antispas-modic power is very inconsiderable - yet the external use of Camphora is generally admitted in Inflamatory Cases - It is undoubtedly possessed of a Sedative power, and is so vo-latile that it may penetrate some depth; but I never found it of much efficacy in external Phlegmone - It has been found useful in Arthritis and Rheumatism; and in these it must be considered as acting by an antispasmodic power - But I do not know how it operates, nor can I explain it on any theo-ry we have of antispasmodics; and should therefore suspect it to be little more than an Emollient.

4. Emetics. Doubts have arisen concerning their use - Their Theory will not apply here as in fevers - We suppose the spasm of fevers to depend on atonia, which Emetics take off - It would be thought very subtile to seek for an atonia in Inflamations - But their is another View of their use - Most Inflamations are attended with a febrile Spasm, which may have a considerable effect in keeping up the Spasm of the Inflamation: and thus Emetics may be of great use, as taking of the fever - yet they are not so useful here as in fevers, because of the Irritation of the part affected, which may continue or renew the Spasm - I have now considered the Remedies used to Resolve Inflamation - But all Inflama-tions

Inflamations cannot be brought to Resolution, and have often different Terminations - The Cases of gangrene and Suppuration affecting external parts, are Cases of Surgery, which I must omit, though I confess I do not understand the Theory of the common practice - The Case of Internal Gangrene I consider incurable - Suppuration is very difficult to Cure likewise, and will more properly come in under particular Inflamations. I have divided them into Cutaneous, Visceral, and Articular Inflamations.

Ophthalmia I have considered as an external Inflamation, but is easily distinguished from Phlegmone, by the nature of the part affected, and by its not being subject to effusions - With regard to it, you will find more sub-tilties in Authors than I can follow - I distinguish two Species of it, by the seat of the Inflamation.

1. When it affects the Membranes of the Eye.
2. When it affects the edges of the Eye-lids -

As to the first, you know the Membranes of the Eye consist of different Layers - Externally there is the Adnata, which is a continuation of the Skin: under this the Albuginea, which consists of two Layers, analogous to the Peritoneum and Aponeurosis - Under it is the Sclerotic, Choroid, and Retina - Very often Ophthalmia is in the adnata only, but it may extend to all the Membranes; and the Symptoms will differ accordingly - Commonly the degree of pain is proportioned to the Depth of the Inflamation, or in other Cases, the depth is known by the Extent of the pain to the nose and adjacent parts - "Rubor et dolor Oculi; lucis intolerantia!" But all these differences and varieties in degree are only one Species - There may be

be still other differences, not merely arising from the seat of the disease, according as the Lachrymal glands and the secretion of the Tears are affected, which varies the state of the Inflamation - It may also arise by the acrimony of the Tears - and no case of Ophthalmia is to be more attended to than this, when a particular acrimony is pro-duced and determined to the Eye, as in Scorbutic, Scrophu-lous, and Venereal Cases.

Consider the Character we have given of Ophthal-mia, and compare it with other Systems. - The particulars of Nosology are perhaps of little importance, but the habit of attending to these particulars has great influence on Practice, and is, perhaps, absolutely necessary - Sauvages and Linnaeus have removed Ophthalmia to the Class of Dolores; and indeed after Platner all Systematics have admitted of such a Class, but improperly - Sauvages adds, "Cum La-chrymatione" - But this is not universal, as appears from the Lippitudo acida auctorum - Linnaeus gives but one Character, "Dolor Oculi" - Vogel has distin-guish Ophthalmitis from Ophthalmia, but this, like many others, is improper - For while Systematics attend to so many of them, they loose the Specific ones.

The Ophthalmia is of two kinds, distinguished by the part affected -

1. As it is the Bulb of the Eye or its membranes.
2. As affecting the Cilia, Limbus, or Tarsus Palpebrarum.

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The Inflamation of the Adnata is discovered by the redness, often attended with a little pain - As this is great -er or more intense, the Inflamation is judged deeper; and more particularly as the Intolerantia Lucis is greater, the Retina appears to be more affected; which is also known by the irritation of the Lachrymal glands, the motion of the pupil, &c. - When the Inflamation reaches the Periosteous Layer of the Albuginea, the pain is more considerable - and this leads me to recollect that I had forgot the Article of pain in Inflamation - Dr Haller has taken a great deal of pains to shew the insensibility of Membranes, as the Pleura, Periostium, &c. The pain arising from their Inflamation has on all hands been op-posed to him - Haller gives a solution that is not satisfactory, from the nerves passing through them, which are more or less affected by the Inflamation - But if this were the Case, the nerves should be so very numerous as to disturb his Experiments - I suppose these Membranes were originally nervous, and really sensible; but have lost their sensibility in consequence of Being more Consolidated, just as muscu-lar fibres lose their sensibity in becoming Tendinous - It is possible to restore it to them by Tension and Irritation; But I own this is a piece of; and I formerly offered, and can now give a better account of the Pain in Inflamations - The Arteries have muscular fibres which are not sensible to the accustomed distension, but when this encreased it be-comes painfull - Thus the arteries of my fingers have no Pulsation nor sensibility; but a Ligature gives them both.

I consider, then, the pain of Inflamation as unconcerned in the Membranes, but depending entirely on the arteries; and this pain corresponds very exactly with the Pulsation of the arteries, which is greater as the Suppuration is nearer - I return now to Ophthalmia

Some difference may arise from the Lachrymal glands being affected together with the Membranes - If the glands are affected by Irritation, they pour out an acid into the Eye; but when their Vessels are affected by Spasm, we have the Lippitudo acida Auctorum - I have added another distinction of Ophthalmia, as Idiopathic or Symptomatic, as that which attends Intermittents, Hemicrania, or Ophthalmia.

I come now to our Second Species - This is seated in the edge of the Eye-lid or Cilia, ~~Limbus~~, Tarsus Palpebrarum. The external Skin and Cuticle are continued along the Edge, and reflected to form the Inner surface of the Eye-lid - And a difference arises here from a number of Sebaceous glands, pouring out a fluid to prevent the Concretion of the Eye-lids - The seat of the disease is properly in these. A particular Acrimony is produced in them which Irritates and inflames them, and occasions a purulent Exudation (such as happens in Children in Crusta Lactea, and Exudations behind the Ears or on the root of the Nose), irritating the neighbouring parts and destroying the Cuticle. I have seen it affect a very great part of the face - It is often this affection of the edges of the Eye-lids that is the primary disease in Ophthalmia - The external tumor and redness of the Eye-lid depend on it; and it may also extend to the internal parts, and produce more

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or less of the other Species of Ophthalmia, which in turn may extend to external parts, and produce more or less of the second Species - yet it is an useful consideration, that sometimes the one, sometimes the other is the primary disease, and requires particular management -

Both of these are distinguished by their Causes - These may be of various kinds, but their effect is an encreased afflux of blood to the part affected - This is more permanent when it depends on acrimony, as in Scorbutic, Scrophulous, and Venereal Cases - Wherever there is that particular acrimony, it oftener induces the second Species than the first; and then accordingly this is the primary disease; and unless we correct the acrimony we do nothing. I Scrophula by Bark, Mineral Waters, &c. - These are the principal Distinctions of Ophthalmia.

Method of Cure - When Ophthalmia is Symptomatic it is cured by curing the primary disease - But we confine ourselves to Idiopathic affections - We begin by the antiphlogistic Regimen, to avoid Irritation. But as it is not a disease of the whole System, it is not of much consequence, except in the particular Irritation of Light - Though there be some Ophthalmias in which the Retina is little or not at all affected, yet it is rare that its sensibility is not encreased, especially in the first Species - In this Case, shutting up the Patient in a dark Chamber, will contribute more to the Cure than Repeated Bleedings - It is often thought sufficient to cover the affected Eye - But this does

does not answer, because of the heat generated, and because of the Corresponding motions of the sound Eye communicated to the affected one — The best way is to keep the Patient in a dark room, or at least slightly to cover both Eyes — after this there are other antiphlogistic Remedies.

1. Bloodletting — I thing general bleeding from the Arm, useless, as commonly there is no fever — Bloodletting is certainly of use by the quantity drawn, but only when it is very large — The chief effect is to diminish the Tension; and if this be not communicated to the part affected, the diminution has little effect — I know that in many Inflamations this is not the Case: e.g. In Pleuritis I have very often seen a slight bleeding answer extremely well; and in Hysteric Cases ℥i. is often as effectual as ℥viij. But in Ophthalmia this is scarcely the Case — and I maintain that a topical bleeding of ℥iv. will be more effectual than ℥xv. from the Arm, chiefly in the first Species. — With regard to Leeches, they are very liable to produce Ecchymosis round the wound, especially when near the Eye-lid, the parts there being of a more Lax texture; so that they should be applied upon the edges of the cheek-Bone (for I have seen such Ecchymosis very troublesome), and they will be almost equally useful — However, Cupping and Scarification are much preferable.

2. Purging. I have said that is not very powerful in external Inflamations, except as a means of Revulsion, as is particularly the Case in Ophthalmia, according to

& the Aphorism of Hippocrates "Diarrhoea superveni-ens curat Ophthalmiam!" There being here no fever we may employ it frequently with advantage - Nay, I am not so anxious about employing only Lenient or Anti-phlogistic ones - We may even employ Hydragogues; and I have found Calomel and Jalap more useful than Salts - As for external applications used in this Case, because of the Inflamation being external, it is found that an artificial relaxation of the Adnata by the steams of hot water, will produce temporary Inflamation - Hence it is concluded that Ophthalmia in great measure depends on such Relaxation; and accordingly astringents were used from the earliest times - Modern Practitioners, imagining that such appli-cations were apt to produce Erysipelatous Inflamati-ons, are much more sparing of them than the anti-ents - But the effect could not arise in Ophthalmia; and I own I do not well understand their Doctrine of Coction, which may thus, they say, be dangerously stopt - I imagine there is little more foundation for supposing that astringents turn the Inflamation in wards - Platner speaks of the Application of Cold; but this I defer till our next meeting -

I omitted an Important Circumstance, Viz, that when the Inflamation is chiefly seated in the edge of the Palpebra, it often disturbs the situation of the Bulbs of the

the Cilia, so that they turn inwards; and by the visci-dity of the secreted matter, are entangled within the Eye-lid; which gives violent irritation, and much encrease to the Inflamation - as soon as this is perceived, they are to be restored to their proper situation, or pulled out. But to return — An objection has been made to the use of astringents, on the supposition of their disturb-ing the Coction of the morbific matter - This I do not understand - It has also been objected, that they are too refrigerant, and much weaken the Tone of the Vessels, so as to induce gangrene - But this is exceed-ingly rare, and I suspect that the aversion of many per-sons from astringents here, is rather from theory than from Observations - It is possible however that the Inflamation may be turned inwards by such ap-plications - Platner gives an instance of it, where the Inflamation of the adnata was changed into what he calls Phlegmone Oculi, by a poultice kept wet with very cold water (gelidissimâ aquâ). But such instances are very rare - and generally as-tringents are very useful in Ophthalmia, with ex-ceptions to be left to the penetration of the Phy-sician - Cold air is often extremely useful - The astringents and Refrigerants commonly em-ployed, are the preparations of Zinc and Lead - With regard to these, they act only in a saline form,

so that from Calamine and Tutty nothing can be expected. Of the saline preparations, there is also a choice - The Cerussa is to be applied only in solid substance, as in Unguentum - But the best of all is the Sacchar. Satur. which is pre-ferable to White Vitriol, as being less stimulant, and more cooling. Copper, as Erugo, has often been employed, but is a stimulant as well as astringent, and is employed as a detergent - I have found it of no use in Inflamations of the adnata; but in considerable Erosions, such as some-times happen in the second Species, nothing, as a detergent, is more useful - But Mercury is the best detergent in this case - Calomel and Red precipitate are used; but are in danger of stimulating too much - Ung. Merc. without Turpentine, is the best - Objections have been made against Ointments to the Eyes; but I have often found them useful - There is some-times a great quantity of viscid matter glewing the Eye-lids in the morning, so that great time and irritation is necessary to separate them - This may be prevented by Ung. Merc. weak-ened with Axunge, and insinuated between the Eye-lids at going to bed; and specially if repeated in the night - Though astringents are more generally useful, yet sometimes emol-ients should be preferred. When the Inflamation is con-fined to the adnata, &c. Emolients are rather hurtful - But when it is more external on the Eye-lids, they may, espe-cially such as preserve the part from drying, be useful - On this principle a rotten apple has been used as a soft Application; and also roasted apples, which may act as as-tringents -

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I proceed to internal Inflamations. Systematics have divided them into Membraneous and Parenchymatous, as affecting the Membranes or cellular Texture. Perhaps this distinction may be found in some Inflamations, as Pleuritis and Peripneumonia - But observe that in many Cases it is extremely difficult to fix the Limits - In others they are not consistent with themselves, making the Cynanche a Parenchymatous Inflamation; & the gastritis, membrana-ceous; & the Hepatitis is manifestly of both kinds, especially the Hepatitis Pleuritica of Savauges - yet it is ranged among the Parenchymatous - I could bring many other Instances, but these are sufficient - In many Cases they can not be distinguished by external Symptoms, as in Phrenitis, &c. I would throw out this as a hint that Inflamation is properly a membranaceous affection, but often likewise affecting the Cellular Texture. Another Distinction has been made of internal Inflamations, into Erysipelatous and Phlegmonoid - But according to the notion we have given of Erysipelas, the Cuticle is raised, and Serum is effused under it - But in internal Viscera there is nothing analogous to the external cuticle; and therefore there is no foundation for Erysipelas, except where the Cuticle is continued in the form of Epithelion - How far this may be applied to practice, I don't know - Therefore I proceed - We have arranged internal Inflamations a Capite ad Calcem.

Gen. IX. Phrenitis

Char. " Pyrexia acuta; dolor capitis; rubor faciei et ocu"=lorum; lucis et soni intolerantia; pervigilium; delirium " ferox

"ferox vel typhomania".

Under this I have comprehended Cephalitis and Sphacelismus, though more commonly the Membranes alone are inflamed; yet often the Substance of the Brain is inflamed also: And it is impossible to distinguish this by external Symptoms. In order however to reconcile the whole of the Symptoms observed in this Case, I have added Typhomania or Delirium somnolentum of Savauges, observed in Cephalitis - Vogel has also united them under the name of Phrenismus - It is, as he says, very difficult to distinguish the Inflamation here - I have seen the Phrenitis vera but once in forty years, and even that was not without ambiguity - The only means of distinguishing it from the Symptomatica, are the general marks of Inflamation, as annunciated in the Character, but coming on suddenly without Previous fever - But is is constantly confounded with the Symptomatic by Authors.

Cure. Large and immediate Bleeding are chiefly to be depended on - Topical bleedings, such as from the Jugular Vein, are here the chief of our Practice - The inconvenience of arteriotomy is greater than in any other disease - The Scarification of the Temples is more sudden and manageable - Till I became acquainted with this practice, I was desirous of restoring the Egyptian practice of scarifying the internal part of the nose - But this is precarious, as the quantity cannot be determined.

Blisters. Practitioners generally apply them to the Lower Extremities - But they are more useful on the head - Purging has been often employed, and I would admit it,

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as a means of Making Revulsion - I need not mention the other Part of the Antiphlogistic Regimen - Camphora has been employed in External Inflamations, but in no Internal one except Phrinitis; and here in too small a quantity - We are told by Dr Ludwig that it has been given even to the quantity of four grains - Since last night I gave it to a dying-in Woman to fifteen grain, with good effect; and it procured sleep after all other Remidies had failed

Gen. X. Cynanche

Char. " Pyrexia aliquando typhodes; rubor et dolor fauci=um; deglutitio et Spiritus difficiles, cum angustio in fau=cibus sensu."

The Term angina has been extended by Boerhaave to all difficulties of Deglutition, whether with or without fever. I have therefore employed the Term Cynanche of Savages and Linnaeus, though with reluctance - It may be divided into two kinds.

1. Symptomatic or Exanthematic; as it is a very frequent Symptom of Exanthemata - We are not to treat of this here.

2. The Idiopathic angina, when the affection is confined to the fauces - This is also of two kinds.

1. Phlegmonoid.

2. Erysipelatous.

The first terminates in Suppuration, the second in Gangrene - In the phlegmonoid there is a great af=flux to the fauces, without specific matter. In the Erysi
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Erysipelatous there is a Specific matter determined to the fauces. The most common of the Phlegmoid is in the Tonsillae; but often extended over the whole mucous Membrane of the fauces, as the Pharynx, Larynx, Velum Pendulum. &c. all these are different in degree only, giving rise to no Species, nor requiring any particular name - The Antients gave them many names - But it is impossible to understand them - I am to treat first of the Phlegmonoid, called by Savages Cynanche Ton-sillaris, of which all other Inflamations of the neigh-bouring parts are only varieties - The words Pyrexia aliquando typhodes are intended to make my Character more generic - I should have added "plerumque tonsil-larum tumor." Sometimes both Tonsills are affected at once, but more commonly only one, or one more than the other - When it Terminates by Resolution, it passes from one to the other, which is a favourable Circumstance.

Cynanche is thought to give a difference when it extends to the Larynx or Pharynx, as affecting the ad-jacent Muscles // The Cellular Texture of the muscles may doubtless be affected by it; but I suspect the muscles are never a proper seat of Inflamation // I add, that there is something in the Theory of this disease deserving particular attention -

1. Cynanche is chiefly owing to the Operation of cold; for it is evident that Cold applied to the external fauces has often produced Angina - I know some persons who cannot bear the least moisture about the neck, without being affected

by

by Angina - On the application of Cold there is an afflux to the Tonsils and adjacent parts, which produces the disease.

2. Cold applied even to the distant parts will often produce that afflux to all the mucous glands of the fauces: The perspirable matter being determined to them.

3. The Inflamation is more ready to break out here, because it is exposed more than others to the application of external air. This is also the Case with Peripneumony and Rheumatism - These three make 19 of 20 Inflamatory Cases, and strongly confirm our general Doctrine - Writers commonly speak of the Cynanche as attended with danger - If so, it is curious, that in my whole Practice I have never seen a person die of Phlegmonoid Angina, though I have seen a great difficulty of Swallowing.

Cure. In general it is the same here as in Inflammation - Blood-letting, in proportion to the fever, is always proper - When the affection is very general, general bleedings are of use - But here topical bleedings are by far preferable; the application of a number of Leeches to the external fauces is the only remedy to be depended on - The Antients, and some moderns, depended much on opening the Ranulæ; but it is a trifling Evacuation, and often inconvenient; and I would omit it.

Purging has been commonly employed, as a means of Revulsion, and may be useful - A particular Purgative, the Guaiacum, has been much used here - I do not find it

it such an effectual Purgative as has been represented - Its Diaphoretic power is admitted; but it often fails, and I have here seen it hurtful by its Stimulus -

Rubefacientia. The Caustic Volatile Alkali, a remedy of Scotch invention, is employed with advantage when it can be found good (mixt with Oil in the Oleum Volatile), as giving a redness to the Parts and promoting perspiration. But as the Caustic is seldom to be had good in the Shops, the mild is substituted in its place; but is not possessed of the same advantages -

Blisters, There may be of use, but I should choose to preserve the Throat for the application of Leeches, applying Blisters to the nape of the neck, where they will have nearly the same effects.

Gargarisms are employed with advantage, chiefly in the beginning of the disease - But they often irritate the fauces by the exercise they give - Syringing, as Sir John Pringle observes, would do much better, though not much used in this Country - As Astringents are the Refrigerants, they may perhaps be used with propriety in this disease at the beginning; but when there is a tendency to suppuration, I find a Fotus, consisting of warm water only, to be more useful, as promoting at the same time the secretion of Mucus - But it is difficult to keep a Poultice well applied to the part; therefore I should rather keep the part warm by the Common Wax Plaister. The Croup is a disease very often fatal in this Country, but it is neither new, nor confined to us. It seems by the Dissections, for which we are obliged to

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Dr Home, to be an affection of the Membranes of the Tra-chea and Larynex; but often attended with a suppuration, which by drying takes the appearance of a Membrane. There are many species of Angina that have also that crust- What induces the Inflamation in the Croup, is difficult to say; but we conceive how it may be promoted by the motion and situation of the Parts; and how, by the swelling, it may prove fatal, and produce fits of Spasmodic asthma- I bring it under the head of Angina, because it comes on more commonly in the time of Catarrhal affections.

Cure. I imagine this depends much on bleeding, and that Leeches applied around the neck would be very useful. We have two Scotch Writers on this subject, Dr Home, who considers it as an Inflamation; and from his dissections seems to be right- But he takes no notice of the difficulty of breath-ing occurring in it- Dr Millar considered it as Spasmodic Asthmatic affection, which indeed may induce an Inflama-tion, but does not proceed from it; therefore he refuses Bleeding, and gives only Antispasmodics- I cannot refuse to admit the facts on both hands, but imagine they may be reconciled thus. The disease is an Inflamation of the upper part of the Larynex, which may easily be cured by other Inflamations when it does not rise very high; but when it comes to a high degree, it may induce a difficulty of Breathing, Spasmodic asthma that may prove fatal. If you would see the account of it by forreigners, read the Nova acta Naturæ Curiosorum Vol. 2. containing a Dissertation by Dr Abergen of Frankfort upon the Order,

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concerning the diseases of Children - This Place is about 100 miles from (Kelso, the Place of Dr Millars practice, is also distant from the sea) - It is unlucky that he did not think of making dissections; but he gives a proof of Infla -mation analogous, from the expectoration of a concr. mem -brane, which he judged to be from a part of the Bronchia. Whoever considers this, with all the Circumstances of it, will see that it is the same disease our Scotch Physicians treat of, and that it is an Inflamation of the Larynx, bringing on Spasmodic fits - That Inflamations of the Larynx and adjacent parts often bring on such spasmodic fits, and how easily they prove suffocating, are proved from Dr Eller of Berlin - see his Treatise De angina. see also what Authors have said of catarrhal Suffocations, very analogous to this - Eller gives a particular Case of a disease nearly the same with this, arising from Peripneumony. If you have Leisure to consider all its Circumstances, p. 247. and 248. they will certainly illustrate all this -

Cynanche Erysipelatosa vel Gangrenum.

But as I cannot suppose you design to study Physic only from hearing me, and as so much has been said on this disease, I think it would be throwing away your time to expatiate here - I shall only say that it is a contagion very specific - It is unlucky that it has happened to several illustrious Persons who have died of it, as al -most all families are hereby deterred from having their

their Children bleed in any Angina; but this is very different from the Phlegmonoid Angina. It appears with symptoms of Typhus generally, and is seldom without Petechiæ, but with little Tumor, and with a degree of exudation, which falling, or being taken off, shews Gangrene below, or Ulcers; but these last appearances are not sufficient. I know many instances of such sloughs attending common Phlegmonoid Angina – With regard to the occurrence of this disease, I have two Observations – 1. The Croup has often been mistaken for it, and it may sometimes end in Gangrene, while on the other hand, the Angina Gangrenosa may sometimes end with the suffocating Circumstance that attend the Croup. – 2. The Angina Gangrenosa may be sometimes Sporadic, and in such Cases Bark may be rather hurtful.

The great difficulty is to distinguish this species of Angina from the Phlegmonoid, as their Cure is different – We may say that the Erysipelatous appears with little tumor in the Fauces, with a livid redness extending farther than the Phlegmonoid, and is particularly distinguished by the slough that covers it – But these marks are not sufficient, as there are Phlegmonoid Anginæ that approach near to them, and are attended with little Tumor, livid redness, and slough; yet they require bleeding, and do not tend to gangrene. I imagine the Erysipelatous angina is more or less attended with Putrid fever, or Typhus, discovered by Petechiæ, and such Hemorrhages as shew a putrid state of the

the blood - as the Angina Erysipelatosa is Contagious, so it is also Epidemic: But we must not trust too much to this Character, as there are always contagions lurking about, and more liable to affect some persons than others, and thus may appear Sporadic - In the Case of Scarlatine Fevers and Miliary Eruptions, though the Exanthematous angina puts on the Erysipelatous appearance, yet it requires bleeding, and is to be treated as Phlegmonoid - Some time ago this was the Case here; - and I saw but one of those angina turn to gangrene, though other Practitioners suspected it oftener - But as far as I can learn there were scarcely two instances of it in some hundreds; and I am not satisfied that the disease was not the worse for being treated as Gangrenous - Therefore when the Pulse is strong and Inflamatory, I would rather treat Angina as Phlegmonoid - Some Practitioners are afraid of a single spot on the fauces; but such spots often happen without Gangrenous Angina. For the rest, see Huxham and Fothergill, besides French Writers. As for the Cure in general, (either by the Mouth or in Glisters) Cordials and the Bark; with Antispasmodics and Detergents.

Gen. XI. Peripneumonia - Pleuritis and Carditis, though here distinct, cannot be treated separately - In general, such diseases as affect Respiration are called Pulmonic - they may be distinguished into three branches:

1. When the Mucous Membrane of the Trachia and Bronchia is affected as far as it goes.

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2. When the affection is seated in the Cellular or Parenchy-matous substance of the Lungs.

3. When in the Pleura in its Whole extent, as it forms the Mediastinum, Pericardium, &c.

1. The Inflamation of the mucous membrane of the Trachia and Bronchia, forms the Catarrh, which I have ranged Among the Profluvia – It cannot be considered as entirely separated from Peripneumonia – But I doubt whether properly it ever extends to the cellular Texture of the Lungs. I imagine the Membrane of the Bronchia does not extend so far as to line all the Cells; or if it, not so far at least as to affect the state of respiration; and when it affects it I ima-gine there is always a Combination of it with the two fol-lowing Genera.

2. That the Parenchymatous or Cellular Texture may some-times be inflamed, cannot be denied; but that Inflamation is very doubtful, as all Inflamations are properly Membrana-ceous affections. Three fourths of Our Phlegmasia are ma-nifestly so; and when the Parenchymatous inflamation is more Probable, as in the Brain, Lungs, and Liver, the Inflamation is very frequently in the membranaceous parts; or at least very universally conjoined with Membranaceous affections – Therefore when there are such appearances of paren-chymatous affection, there is a presumption that the Mem-branaceous is the Primary disease, with this Circumstance, that it may more affect the Vessels and produce an Effusion, which distinguishes the Parenchymatous affection – But it is

is dangerous to embrace any absolute Conclusion in Physic. There are frequent Occurrences of purulent affections, seated in the Cellular Texture, without any Conjecture of Membranaceous affection. Thus, there are Vomicæ in the Lungs, in the Brain, and in the Liver, but I suspect there are Chronic diseases, arising from effusions produced by other Causes than Inflamation, and which give rise, by their Acrimony and Stagnation, to Inflamation and Suppuration. But when the Inflamation is sudden, I would always suppose it began in the Membranes, and afterwards extended. Boerhaave here supposes a difference, as the affection is in the Bronchial or Pulmonic Arteries - But no Practitioner has been able to mark the symptoms of each, so that is merely a matter of Speculation.

3. The third Section of Pulmonic Inflamations is, when the seat of the affection is in the Pleura - To this head I refer such Pulmonary Inflamations as are purely membraneous - It has been supposed that it may be distinguished by that part of the membrane which is affected, as it lines the ribs, covers the Lungs, extends over the diaphragm, forms the Mediastinum, or is continued over the Pericardium - authors have thought it necessary to distinguish all these seats by different Terms, as Pleuro-peripneumonia, pleuritis, paraphrenitis, Inflamatio Mediastini, and Pericarditis. Whether there is any propriety in such distinctions is very doubtful, and it is very difficult to distinguish these Differences - Take for Example the Pleuritis. Sometime ago it was not doubted that the Inflamation in that disease was seated in the Membrane lining the Ribs; yet it is now allowed by every Physician that, it never exists there at all, or that it is much more frequent

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in that lining the Lungs - In Nosology we must take our Character, not from the Seat of the disease, but from its Symp-toms - But is there any foundation for distinguishing Peripneu-monia from Pleuritis? - The fever, Cough, &c. are common to both - But in one Case the Pain is dull and Obtuse "Dolor Gravativus" obscurely limited, of uncertain extent, and as commonly felt under the Sternum as between the Scapulæ - In the other case the pain is pungent, and exactly limited, so that you may put your finger on the very part affected - Observe,

1. That the dull, obtuse, undetermined Pain is commonly at-tended with Dyspnoea to a degree requiring an erect posture, or at least preventing lying on the back.

2. There is always an Expectoration, most commonly streaked with blood.

3. There is a considerable anxiety, and uneasiness of Respirati-on, arising from the Anxiety rather than from the pain.

4. More or less flushing or suffusion of the Cheeks. all these marks shew that here the Inflamation is accompa-nied with more effusion into the Lungs, or that the disease consists entirely in that - Hence the anxiety, the Dyspnoea, the flushing of the face, from the difficult Transmission of the Blood - If it is to be distinguished at all, these Symptoms distinguish Peripneumonia from Pleuritis - The effusion takes of the acuteness of the pain. (Vid. Char.)

On the other hand, with the Pungent pain are con-nected,

1. Less anxiety, and the Dyspnoea is neither so constant nor

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depends on this, but rather on the Pain of Inspiration.
2. More commonly the Cough is dry, especially in the beginning.
3. The erect posture is not necessary; but the Dyspnoea and pain are encreased by lying on the sound side. These Symptoms shew that the Inflammation is more purely or entirely Membranaceous, accompanied with less Effusion – When we have thus distinguished two genera of Pulmonic Affections, I must propose a Problem

Why is the Acute and pungent pain always in the Side, and never under the Sternum, or between the Scapulæ? You see why the Problem was never proposed before, as there was little difficulty in it, when the Pleura was thought always to be affected; but now we know that it is more commonly the Membrane investing the Lungs – When the acute and pungent pain is felt, it may be said that the Inflamation is rather in the external part of the Lungs, subjacent to the Pleura: But this will not do, as in Respiration that part of the Lungs changes its place: whereas the pain is fixt and constant in one Place – That the Lungs move upwards and downwards is discovered by dissections of Living animals, without opening the Pleura; because their motion not only depends on that of the ribs, but also on that of the Diaphragm. The only way of resolving the Problem seems to be, that in all Inflamations of the external part of the Lungs, there is always an adhesion to the Pleura, which is found by dissection, and explains well the pain, and the reason of

of its being so limited. If such an adhesion in sound Persons does not cause pain, it is because of its gradual Progress, and its happening sound parts - But this very much disturbs the distinction I endeavoured I endeavoured to make between Peripneumonia and Pleuritis - cases have been seen of Peripneumony with acute pain, and Pleurisy with soft pain - But besides these are doubtful, this may depend on the situation of the parts. Our chief conclusion is that the absence of acute pain does not certainly show the Inflamation to be in the Lungs; but if their is a distinction, it is from the Inflamation in Peripneumony existing rather in that part of the Lungs that cannot adhere to the external Pleura.

We find great difficulties in Distinguishing Peripneumony and Pleuritis by their Proximate Causes, as many Membranaceous parts of the Thorax are often inflamed without Symptoms of Pleuritis, and particularly without the acute pungent pain taken into its Character - If this were not the case, why should that acute pain be always felt in the side, at least in 19 of 20 cases? - I have endeavoured to explain that difficulty, by saying, that the acute pain occurs when the Inflamation is in the external part of the Lungs, when these adhere to the proper Pleura: Whence this membrane is more distracted - We know that in many Cases the membrane of the Lungs being inflamed communicates some degree of Inflamation to the Pleura; and this we may take as a Conclusion, that there is no acute pain without a membranaceous Inflamation - We have no other Symptoms

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for distinguishing the part affected - Therefore there is no foundation for genera of Mediastinum, Pericarditis, &c. So far as I know the Pericarditis never happens without being combined with Mediastina, Pleuritis, &c. I can say the same of Carditis. I have made a Genus of this, because of the Singularity of the Symptoms that distinguish it; but perhaps it is more properly a Species - The Pleuritis is one of the most frequent and striking Membranaceous Inflamations - I have put under it the Paraphrenitis, distinguished by all Writers: but the proper pleura is very rarely inflamed, and therefore also the extension of it over the Diaphragm - You will find many Syptoms of this in authors, but none that are not accompanied with Disections are to be regarded. This uncommon - and the same Symptoms have been produced by other Causes; as a Bag formed there - see Morgagni. But is there always and constantly a delirium attending such Inflamations? There are some Cases in which it does not appear, and many in which it occurs - But all Inflamations of the Breast are often, without distinction, attended with Prenitis and therefore Delirium - If, therefore, the Paraphrenitis is to be distinguished, it must be by Symptoms that depend on the Functions and Situation of the part affected, such as Hicough, pain on Deglutition and full stomach, &c. -

Savauges has twelve Species of Peripneumonia, and they may be ranged under three Sets, the Simple, com

Complicated, and Symptomatic –
1. The Peripneumonia Vera is the only one properly comprehended under the first title – Perhaps the Gastrica may be ranged here also; but it is extremely ambiguous. You may find in Morgagni a Case in which it was mistaken for an Abdominal affection –
2. The first of the Complicated, is the Catarrhalis, when the Catarrh is joined to Peripneumony – I think it is a complication, but it is that which approaches nearest to simple ones – In the 2. 3^d. 4th. 5th and 9th Species we have Complications of Peripneumonies with fevers and Exanthemata – The chief use of this distinction is, that we are not much to regard the Peripneumony, but the fever, which is the primary disease – If the fever be Intermittent, we give the Bark. &c. Yet I own this rule is not universal, as the Peripneumony attending the Meazles is to be treated as a general Inflamatory Peripneumony – Whether it is not the same in Small Pox, miliary Eruptions, &c. I cannot say.
3. The other four Species are purely Symptomatic, or unintelligible to me – The Peripneumonia Phthisicorum is not to be treated as a Peripneumonia – The Arthritica gives some difference – Many Metastases of the Gout cannot be treated as genuine Inflamations – The other two Species are taken from solitary Examples, and not clear –

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As for the Pleuritis, there are twenty Species which may be ranged under two sets.
1. The simple and Purely Inflamatory.
2. Complications -

The Pleuritis vera, Pulmonis, Dorsalis, Mediastini, Pericardii are simple pleurites, but distinguished by the Part affected - It is certainly much more allowable in Sauvages to make Species of these, than in Vogel to make them genera; but even as species they are not always distinct, and such a distinction is useless - The Pleuritis Hydrothoracica is no Species at all, but only a different stage of the disease; as other Inflamations of the Thorax end in the same manner -

The other Species are all Complications with fevers, which are of two kinds, as being Intermittent, as in the Pleuritis Periodica, which is rather to be treated as a fever; or more Continued. The Pleuritis Biliosa, Putrida, Erysipelatosa (I doubt of such an affection in the Internal Parts), Pestilens, Catarrhalis; this last is a complication approaching most to a simple - The Pleuritis Convulsiva is not characterized; the Arthritica, Verminosa, Hepatica, &c. are no Species, but other diseases mistaken for it - The Traumatica, Miliaris, Lactea, Polonica are Symptomatic only, and even as such, doubtful Species

Species.

Thus far I have distinguished the different affections of the breast; but there are other distinctions to be made according to the different Species of the disease. But the Connection between these disease and the external symptoms relates to the first Stage only.

They are terminated by Resolution, when there is no distruction of the part affected, and it is restored to its functions - This is but a rare occurrence. Excretions and Effusions are a more common manner of Termination - Of Excretions the most common and Universal is that of a quantity of Matter thrown out by the Lungs in Coughing, an Excretion better expressed by our word Expectoration, than by the Latin word Sputa. Inflamation of the Lungs are often terminated or accompanied by that Expectoration of matter, which has been much spoke of, but not easily Explained - It is seemingly the secretion of the Bronchia, the same that attends a Catarrh. but while this makes a part of it, it is not determined whether there be not an Exhalation from the extreme arteries of the Lungs, as we cannot doubt that the Extremities of the Pulmonic arteries constantly exhale a vapour into the Bronchia, which is often in a humid and Liquid form - How far this may put on the appearance of a Secretion, or in what different forms the ordinary mucus may appear, I cannot determine - Hippocrates has enumerated a great number of different Sputa,

and

and the moderns have commented largely upon this - Hip-
-pocrates concludes with this very general Proposition, that
if these Sputa relieve the Symptoms, they are good Prognoses,
if not, the contrary - I cannot determine the matter - There
are three lights in which the Sputa may be considered.
1. As the Excretion of a morbid matter - In some Cases of Ca-
-tarrh I do not doubt of the existence of such matter; But
when the disease depends merely on Cold, as also in Pe-
-ripneumonia and Pleuritis, the supposition is purely
Hypothetical -

2. As a means of resolving the Spasm of the extreme
Vessels - Thus I have had occasion to explain in our gene-
-ral Doctrine of Inflamation, how forming an exha-
-lation near the part affected was useful in that way - It
may be the same here - But I suspect that in most Cases,
3. As a symptom accompanying rather as an effect than
as a Resolution of Spasm - If we consider how often
Expectoration does not appear till after bleeding and blis-
-tering; the Spasm is resolved, I think - This is the most
Probable Case, but under any one of the three, it is one
of the best symptoms of the disease - After many Authors,
particularly the Antients, Boerhaave has mentioned seve-
-ral other means of resolution of these Inflamations.
1. Spontaneous Hemorrhages from the Nose and other Ves-
-sels - This is supported by facts - and as artificial bleed-
-ings often resolve the Spasm, so may spontaneous ones.
2. Urine, if turbid, and depositing a Sediment equally
uniform, white, and puriform - No doubt this may
occur in warm Climates; but it is not common with

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us; and in general our Crises do not occur in febrile dis-eases as described by the Antients (The change of Urine in this Country is more frequent in Fevers than in Phlegma-sias). This too is considered as the expulsion of mor-bific matter, but is a mere hypothesis; and should rather be considered as the effect than the Cause of resolved Spasm.

3. Stools. These are less observed with us than they were among the Antients - When our best Authors, as Cleghorn, agree in any fact with the Antients, and in the same Character, I admit it, and receive Instruction; but when they differ, I doubt it - This is the Case here - Cleghorn observed but one such termination of Inflamation: des-cribed Pag. 253. and this was not pneumonic, but a He-patitis.

4. Inflamations and Abscesses found in other parts of the body - This is a subject I must explain - I have already observed that Topical Inflamations produce a Diathe-sis Phlogistica; but the causes producing Topical Infla-mations, produce also a general Diathesis Phlogistica; which is to be considered as a more general part of the disease than the Topical Inflamation - this general Diathesis gives a Tendency to Inflamation, which is de-termined to some part by particular Circumstances - Com-monly in Pleuritis and Peripneumonia it begins in one side only; but frequently it also passes to the other. I have said it is often accompanied with Phrenitis - It is also often attended with Angina, and Morgagni relates many examples of its being attended with Ab-dominal Inflamations; which can be explained only by some general Diathesis prevailing, and being de-termined to some particular part by some particular Cir

circumstances - Cleghorn observes the same in many parts of his works, and takes notice of a termination which he calls a Translation of Morbific matter to the surface of the body - Whatever may be in this explanation, there are facts that deserve our notice, whether they prove the Translation of morbific matter, or rather the determi-nation of the general Diathesis - When it attacks another part, the first affection is considerably relieved -

Thus far I have given you an account of several critical Excretions, as mentioned by Boerhaave - But there is another not observed by him, Viz. Sweat. Consider whether it be a cause or an effect of resolved Spasm - With regard to all these Excretions, - It appears from the Antients and the accounts of Cleghorn, that they occur indeed in warm Climates, but they are rare with us, and therefore not taken notice of by Sydenham, Pringle, &c. The reason of this is, that in warm Climates fevers are oftener Com-plicated with Phlegmasia - See the Letter of Dr Grant in Cleghorn on this subject. Praeterea Pleuritis saepe asso-ciatur Febri, &c. I think the Crisis in such Cases belongs rather to fever than to Phlegmasia -

2. Pneumonic Inflamation often ends in suppuration. The time of this is very uncertain, and depends on the different Circumstances of Absorption, Impetus, exercise and heat, &c. - There is no saying that an Inflamation of the Lungs cannot be resolved after the 4th or 7th Day, as we have examples of Resolution even to the 14th days.

Yet

yet the Circumstances and the Symptoms are here very very obscure and uncertain - However, we may say that the duration of the disease after the 7.th day, without Excretion or symptoms of resolution, and attended with symptoms of Suffocation, leads us to conclude it probable that there will be a suppuration -

As for the tendency to Suppuration, we may distinguish it by the abatement of pain, while the Dyspnoea subsists or encreases; by the fever being more considerably exacerbating, the pulse softer, but as frequent, and attended with Horror - We know the suppuration is come on by the continuation of the Cough, the Exacerbations of the fever twice a day, attended with Sweat, Sediment in the Urine, Clearness of the Tongue and Eyes, and the state of the Decubitus - This last I cannot universally explain - The fact is, that before Suppuration, the Patient lies on his sound side, but afterwards on the affected side - Boerhaave mentions the Translation of Pus by Absorption, and Deposition in other parts, as in the Liver. That when Pus is formed it is sometimes absorbed, we cannot refuse; but it is a very rare Occurrence, and cannot be applied to explain the Translation of Abscesses, which happens so early in the disease, before there is any presumption that Suppuration has taken place in the Lungs. Van Swieten corrects him in his Commentary on Aph. 837. There he considers these Translations as belonging rather to morbid matter than Pus

3. A Third Termination is by Gangrene - The tenden

tendency to this is perceived by the Violence of the Symptoms that express considerable Effusion, and in Consequence, by the Septic nature often prevailing - Its having begun is more certainly known by a sudden remission of Pain, by the weakness of the Pulse in the whole system, continually encreased; mild Delirium, cold Extremities, and cold Sweats - The Symptoms commonly mentioned by Writers. No doubt such a Termination sometimes follow Pneumonic Inflamations, and is fatal; but I would alledge that it is by no means often; and there is here almost always an other Termination concurring, viz. Effusion of red Glo-bules not fit to be absorbed, tending to Putridity, and thus inducing Gangrene - But when that Effusion is con-siderable, it may be the Cause of Suffocation, and is per-ceived by difficulty of breathing, rather from Anxiety than from Pain - accumulation of blood in the right Ventricle, ~~preventing~~ the Return of Blood from the Upper Extremities, and thus inducing flushing of the face and Suffocation. I lately had a Patient (Eliz. Stuart) in the Infirmary, that died so, and could always lie easily in a recumbent posture; a Circumstance which puzzles me with regard to Decubitus. The Effusion may alone produce death; but it may also, and appeared here to, be united with Gangrene, or tending to it. - The dissection always shews in such Cases the Lungs Livid, inflamed, and sinking in Water. -

I have no Experience of the Termination by Scirrhus, therefore I leave it for you to make the best of it from the

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accounts of Authors - There is another little noticed, &c. Effusion from the External surface of the Lungs into the Cavity of the Thorax - There is scarce any Dissection of a Pneumonic Patient in which this is not found to be the Case. Vid. Savauges Pleuritis Hydrothoracica. It is possible that this may prove a means of Resolution, or it may be considerable enough to Cause Suffocation and Death: But generally in Dissections the quantity found is not so great as to produce death, without the Concurrence of internal effusion. In short, Pneumonic Inflamations often end in Hydrops Pectoris - I have seen Instances of it - Eller and Lieutaud also mention some, chiefly in such Patients as have been injudiciously treated by large bleedings - I have said that this may induce too great a Rigidity, and cause such an effusion, or at least dispose to it in Vessels previously stretched by Inflamation - The Pleuritis Spuria and Peripneumonia notha are commonly treated here.

The Pleuritis spuria is a Rheumatic affection of the Muscles about the Thorax, and therefore is a proper Rheumatism, and to be treated as such: But it sometimes gives ambiguity, and may be confounded with the Pleuritis Vera. When the Pain of the side is without fever or Cough, there is no ambiguity. But Pleuritis is often accompanied with Catarrh, and Catarrh with fever and Rheumatic affections of the Muscles of the Thorax, chiefly of the Serratus Major - The Rheumatism has the pain encreased by touch; but catarrhal affections are not always so; but then the Pain always encreases on moving the Trunk of the body, and therefore

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external Pressure and motions of the Trunk of the body, are sure means of distinguishing Pleuritis Spuria from the vera.

Peripneumonia Notha is little noticed by Authors - Sydenham was the first who mentioned it, and Boerhaave has done little more than copy after him. But few have spoke of it with any accuracy - a bold, nay an Impudent Critic, Lieutaud, tells us that Sydenham and Boerhaave have described different diseases, and on a Hypothetical foundation only - He then himself describes the true Peripneumonia Notha - But he is mistaken; for Van Swieten compares Sydenham and Boerhaave as agreeing together - and Lieutaud himself describes other diseases - I would refer it to the Catarrhus Senilis - Catarrh is a frequent disease among old people, among whom it has an encreased afflux to the mucous glands of the Bronchia - When Catarrh is Epidemic it is chiefly fatal to old people, in consequence of the serous Effusion or afflux induced by it - at the same time there is here a complication of Peripneumony and effusion of red Globules - There is little fever, or other Symptoms of Inflammation; but those of Effusion are considerable. Whence appears the difficulty of Cure - Bleeding has little effect here. Sydenham and Lieutaud forbid it - Early Vomits and Blisters are the chief Remedies - When there is very little Inflammation or fever, perhaps Stimulants and Vol. alkalis might be of use.

Cure of Pneumonic Inflamations. The

Indications are, to diminish the Impetus of the blood; and To relieve the Spasm of the Part.

1. Bloodletting is always understood under this Indication; but it is particularly necessary here, to as great a degree as the Patient can easily bear - The first Bleeding should be large and copious as possible - If the chief danger here is from the Effusion, it is only thus that we can prevent it: the subsequent ones must be smaller and at longer Intervals - Some Practitioners have talked of limiting Bleeding in the beginning, as Eller and Lieutaud, but without foundation; and if the Symptoms recur violently after the fourth or seventh day, Bleeding must be repeated - Perhaps no body has established with more propriety the use of Bleeding here, than Cleghorn; but perhaps he pushed Bleeding in general too far. He tells us that at Minorca there is oft a Remission of the disease, but that it recurs with great violence after the sixth and seventh days, and is to be treated by Bleedings. I mentioned, when speaking of Phlegmasiæ in general, the Cautions necessary in the use of Bloodletting - There are Reasons for those Cautions, particularly here - It is alledged that Bleeding may suppress the excretal secretion of Mucus, or weaken the Patient so as to prevent its Excretion. But this has little weight with me; for tho' I would not absolutely deny that Secretions are stopt after large Bleedings, yet I have no proof of their being particularly directed there; and I imagine that the dry Cough at the beginning of the disease is the effect of Spasm,

Spasm, which will be taken off by bleeding – In short, I think this procures a free expectoration fifty times, where it suppresses it once. I cannot say that it is impossible for it to weaken the Patient; but I believe there is here a source of fallacy, and that the suppression of Expectoration, when it happens, arises rather from a debility induced by Effusion than by Bleeding – When there is a doubt concerning the length to which general bleeding may be carried, we may have recourse to topical Bleedings – But these are here little to be trusted to. Because they cannot be applied but at a distance from the part affected; and because they are usually employed too late, after general Bleeding – But when the pain is considerable and shifting, they may be very useful –

Purging has here been a subject of dispute – Some blame it as diminishing the Expectoration; but at the same time it is allowed that the belly should be kept open to one or two Stools a day. This Practice is chiefly followed by Dr Eller of Berlin –

2. The other Indication is, To take off the Spasm – Blisters are here effectual in proportion as they are near the part affected, and are not dangerous by their stimulus – I would therefore apply them all around the Thorax; and would next prefer the Arms – Emollients and Poultices have been Proposed, but are inconvenient and inferior to Blisters – Rubefacients are an antient remedy, and perhaps may be of use –

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Emetics are useful in fevers, to determine to the Surface; but as we have no experience of their removing Inflamatory spasm, we dare not employ them in Topical Inflamations, because of the repletion of the Vessels - yet the French employ them in the Beginning after bleeding; and I have seen that practiced without bad Consequences. In the end of a disease they are given, but under another Indication.

3. A Third Indication has been proposed, in consequence of a Theoretical Conclusion, Viz. to promote Expectoration. That there are expectorant Remidies, particularly encreasing the mucus of the Bronchia, I will not refuse; but most plants ranged under this head are Aromatics, which I should suppose too inflamatory a stimulus, and should think them of little use. The chief Expectorants Employed are Squills, Gum Ammoniac, and Volatile Alkali.

Squills, no doubt, may stimulate the Bronchial Glands, without considerable Inflamation. But it is difficult to convey them there in the quantity necessary for the pur-pose, without much affecting the Stomach and Guts - If therefore they are found of use, I would say it is as an Emetic. The best Practitioners have trusted little to them - Pringle, for whose Opinion I have a great regard, prefers Gum Amoniac - But I have not seen great effects from this as an Expectorant - Volatile Alkali is the best of the Three; but it is rather to be avoid in the beginning, because of its Stimulus -

Emolli.

Emollients seem more useful as Expectorants - accordingly Oleaginous and Mucilaginous substances have been employed - They are said to enter the blood, and correct its acrimony - But surely two or three Drachms of Spermaceti, given two or three times a day, can have no great effect in Correcting this pretended acrimony. Oils are given by DeHaen to some Ounces, repeated often in the day - These might be more effectual, if our Stomachs, like those of the Austrians, could bear them - But I would rather ascribe the good effects to the Opiates he mixed with them - With regard to Mucilages, they may be more useful, but still they are doubtful, because of the small quantity in which they are Employed. In Cases of Acrimony of Urine, they have often disappointed me, and but rarely answered my Expectations - I rather attribute their effect to the dilution that accompanies them - Water alone, perhaps, would be of as much use, as when two or three Ounces of Gum Arabic are dissolved in it. It has been Imagined that part of the Expectorants pass directly from the mouth to the Trachia: but it is particularly to be observed, that the Mucous membrane lining the Larynx is endued with extreme Sensibility, in Consequence of which the Irritation exciting Cough in Catarrh, happens there much oftener than in the Bronchia; and even when it proceeds from Vapours arising from the Lungs, it is much more probable that it is applied to the Larynx than to the Bronchiæ. When, on one hand, the Mucus is diminish-ed

diminished in Catarrhal affections, or the Acrimony, on the other, is encreased, the Irritation is also encreased; and the only means of preventing it, is by supplying the parts with Artificial Mucus, which may be conveyed in form of Linctus - But these are too fluid - It is better given in a solid form, & be melted in the mouth - There is not perhaps a better Lozenge than a piece of Gum arabic constantly held in the mouth. Sugar alone, or Extract of Liquorice afford a good Mucilage - and this last with Gum arabic, as in Pomfret Cakes, is the best after pure Gum arabic - Our Linctuses are composed of Mucilages and Acids, which operate by exciting the action of the Mucus glands, so as to secrete more Mucus, which is called by some Physicians, but more particularly by Old Women, Cutting the Phlegm.

In making a little haste to finish the subject, I find we had fallen into a little Confusion; therefore it is necessary now, not to repeat, but to arrange it better - An Indication in Pneumonic Inflamation is, To promote Expectoration, which is always a salutary excretion - This is done,

1. By Stimuli, such as acid Pectorals -
2. By relaxing the Vessels, with Emollients, and chiefly by the Introduction of warm Steams into the breast - No doubt this is a powerful Remedy. Of this I said enough on the subject of Angina, but repeat here, that I have no faith in the Impregnations employed - Even Vinegar will not

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exhale in the way and by the heat we use, at least not in sufficient quantity to be perceived by the smell, and therefore will not affect the Trachea - Another method is to moisten the Fauces with warm fluids, as Decoctum Pectorale; but that of the London Dispensatory is far inferiour to ours. It is not more conveyed to the breast than Linctus, yet it may be of use -

3. By Preventing the Cough, which does not allow the mucus to take its Consistency and Viscidity - and on whatever footing you take it, whether as preventing the Cough only, or as promoting Expectoration, it is useful - Coughs may arise here from Causes that do not fall under our practice, but we must here consider it as depending on the acrimony of the Mucus, natural or acquired. We cover it by throwing into the mass of blood, substances that Inviscate it - The acrimony operates chiefly on the membrane of the Larynx; we prevent its effects by promoting the Excretion of the Mucus, by warm Fomentations, by acids, or applying an artificial mucus - We take off the sensibility of that membrane by Opiates, which are certainly useful to quiet cough. How they operate, is not yet well determined; but is allowed on all hands, that the Proposition of Tralles, that Opium does not agree with pure inflamation, is strictly true - De Haen and others give much Opium in Peripneumonys. I suspect here some fallacy, and that they have employed the Term Peripneumonia for Catarrhal affections - But I suspect too, that our best Practitioners have too much

limited

limited the use of Opium here _ Cleghorn employed it only in the last stage of the disease _ see on this Pringle, Pag. 149. "Sometimes, &c." _ And I imagine that Opium may often do more good by taking of the Irritation, than hurt by increasing the Inflamation _ But it is safe only when the symptoms of Inflamation are decreased _

It often happens that the Expectoration is too copi-ous and Viscid, so that it is thrown out of the Lungs with diffi-culty: to give it fluidity, Expectorants may be useful _ and it is under this head that Volatile alkalis, and chiefly Eme-tics, may be ranged _ Thus much for the Cure of Pneu-monic Inflamation by Resolution: As for Suppuration and gangrene, I refer you to Authors; but shall speak more fully of the former under Phthisis.

Abdominal Phlegmasia. These are rare oc-currences, as 99 of 100 Inflamations are Anginæ, or Pneu-matic or Rheumatic affections _ yet Abdominal Infla-mations sometimes occur _

Peritonitis. This is not much taken notice of in Systematics. In speaking of Pleuritis, I drew an argument against the existence of pure and proper Pleuritis vera, from the rare occurrence of Peritonitis. Causes determining the Inflamation to the purely membraneous part, not connected with the Viscera, are not clearly perceived; and it is proba-ble that it is only from the connexion of the Pleura

or

or Peritonæum with the subjacent Viscera - Vogel has made four genera of this, Viz. Peritonitis, Mesenteritis, Omentitis, and Myocoilitis - As for Omentitis and Mesenteritis, they are only affections of Continuation of the Peritonæum - The Myocoilitis I doubt off, and believe the Muscles are never In-flamed, but in Consequence of Inflammation of the Peritonæ-um or Skin - Vogel himself says "Symptomata ut in Peritonitis!" This is no Character at all - And the same may be said of the Pancreatica that follows, of which Vogel says, "Notæ deficiunt." all such Inflamations are known to exist sometimes, from Dissections; but by the same means we learn there is hardly an instance of their occuring alone - To me, then, it is doubtful whether I should estab-lish such a Genus - But it would be too forward to determine this. If you look into its Character as we have given it, you will find that, "Absq; propriis aliarum phlegmasiarum abdomi-"nalium signis," is the only one that is purely generic - How far "Dolor abdominalis corpore erecto auctus," applies to all the Species, I will not say - Linnæus was so persuaded that this was never a primary disease, that he has omitted it altoge-ther - Savauges speaks only of the Epiploitis, of which his Character is, "Dolor circa Hypogastrium et Umbilicum "juxta epiploi extensionem!" - But I must own I have here done injustice to Savauges in taking the words of his Sy-nopsis, as he afterwards gives other Characters - "Circa Hypogastrium" is incorrect, and he has corrected it afterwards by

by saying "circa superiorem partem". But the limits of the pain here are very uncertain, and may extend to the whole abdomen - Vogel, from whom we might expect the best distinction, has given none - His Character of Peritonitis will apply to many Cases of Enteritis - In that of Omentitis the pain is every where, and therefore no where - As for the Me-senteritis, there is nothing precise - He means there to allude to the Febris Mesenterica of Baglivi; but was even in Baglivi a piece of inaccuracy - I have told you that Intermittents are often accompanied with Abdominal Inflamations *. As for the other Characters given here, they are not constant - It is very Important I think to ex-amine how far internal affections may be distinguished by External Symptoms - But there is little to be done here in that way - Dr Fordyce, in his Elements Physic, has the Title of Inflamation of the Cellular Texture under the Psoas muscle; which is but a rare Occurrence - See on this Morgagni Ep. 57. Art. 20. - And also Antonio Bene-volo - There may be a suppuration formed there, glid-ing down from some other part along the Peritonaeum. Fordyce himself does not pretend to make a distinction of it in Practice, and concludes it to be treated as Inflama-tions in general - Our Conclusion concerning Peritonitis is

* These are purely symptomatic - "Dolor Colici similis" is common to many abdominal Inflamations.

is the same, - As it occurs rarely and is seldom to be distin-guished -

Gen. XV. Gastritis. Perhaps there may here be occasions for curious distinctions, according to the different Coats affected - Thus I can perceive that it may often be an affection of the Epithelion only, and that body analogous to the Rete mucosum of the Skin - It may also be in the Tunica Cellularis nervosa - In the external Membrane, Or in the Peritonaeum covering the stomach - But dissections do not allow us here to make use of such distinctions - Differences in the Cause may be referred to three heads.

1. It may arise from the introduction or generation of an acrid matter in the Stomach.

2. From internal Causes, which more certainly produce an Idiopathic Inflamation

3. It may be complicated with fever, of which, like other Abdominal Inflamations as observed above, it is often the effect. Of these, the two last are chiefly to be considered - The first is evidently to be cured by Evacuating the Acrimony, which is done by Diluents and Vomits, or by correcting its nature when known, as by Alkalies and Demulcents (oils) of all kinds, to Sheath the Acrimony and obviate its effects -

With regard to the second, whether such Idi-

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Idiopathic Inflamation truely happens, is difficult to say. Circumstances determining the Phlogestic Diathesis to the Stomach, alone are not frequent; and we would be anxious to determine whether it is not always a complication. An Enquiry very Important to the Cure; for Boerhaave having in view the Idiopathic Gastritis, only ordered Bleeding, while Hoffman forbid it, considering the disease only as symptomatic - As for the Characters, the place of the pain, its encrease on eating, are very distinguishing Marks - But is the Pyrexia Typhodes a good one also? In giving it I was aware of the Distinction between Idiopathic and sympathetic Inflamations; but perhaps I was rash in following Boerhaave. Linnaeus and Savauges, considering it as symptomatic, have given it the Character of Pyrexia Asyria - But it is not by this alone that we can judge of the Disease; yet I think that in Gastritis the Pulse is small and the strength prostrated more than in other internal Inflamations - When Gastritis is Idiopathic, the method of Cure of Boer-haave, by Bleeding, is to be admitted; and when the Complication with fever does not appear, we must pay little regard to the smallness of Pulse and prostration of Strength.

We have said that these Inflamations are rare Occurrences; and this is a proof, that in two years were admitted into Hasler Hospital 5700 Patients, among whom there was not one Idiopathic Abdominal Infla-

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Inflamation; nor by the bye, was there one Idiopathic Phre-nitis. Rheumatisms, Pneumonic Inflamations, and Anginæ were frequent - The same might be proved from the Catalogues of other Hospitals - The History of these di-seases is by no means complete - They are well treated in the Systems, but upon Theoretical Conclusions only - The Symptomatic affections are by far the most frequent - They are Symptoms of fever, particularly of Remittents. As to the farther Cure (after Bleeding according to Boerhaave) of this disease, Gastritis, we are precluded from all internal means, as the Stomach will hardly bear any thing but the blandest Medicines, and even these in small quantity only. But nothing is more necessary than keeping the belly open by Glisters - As Demulcents are useful in In-flamation, we must here inject them by the Anus - I would inject many Glisters (to be retained) of warm water - As for the Rest, the Antiphlogistic Regimen and Blistering will be suffi-cient - Blisters (upon the Epigastrium) have been much doubted of, and have been employed more in England than any where else. In general Blistering is not only useful to remove pure Inflama-tion, but nervous spasm also.

Enteritis. This is also Idiopathic and Symptoma-tic, particularly of fever, Dysentery, and Colic, which has occasioned a considerable difference in the Characters employ-ed by Nosologists - They have all improperly attempted to comprehend both in one Genus - Vogels Character of In

Enteritis is, "Intestini Inflamatio; Febres afodes, plericodes!" in allusion to the fevers with which it is combined, "Cruciatus Ventris intolerabilis, Flatuum et Stercoris retentio, ut Dy-senteria" - Which throws much ambiguity on this - Linnaeus has proceeded upon the same plan - His Character is, "Febris cum Evacuatione Abdominis, Colica atroci, tensiva, calente." To understand it you must look at the morbi Evacuatorii; but he had in view to comprehend Dysenteria - Sauvages defi-nition has also the same fault, as comprehending Dysenteria. It has long been a prevailing Opinion that Dysentery depends on an Inflamation of the Intestines - But we now know certainly, that though Inflamation may upon many Occasions accompany Dysentery, yet it is no essential part of the disease - and even though it should, yet as the Cure of Idiopathic and Symptomatic Enteritis is very different, this last should not be comprehended under the same Genus - Therefore my Character is very different, com-prehending only Idiopathic Enteritis! "Pyrexia Typhodes," alluding to the small contracted Pulse attending Abdominal Inflamations; - "Dolor Abdominis pungens," a very frequent Symptom, but not very constant. "Circa Umbilicum tor-quens," is more so - Practical Writers, among whom is Van Swieten, account for it, by saying the small Intestines below the Navel are chiefly affected - There is no foundation for this, as the Inflamation is often in other places - But I imagine the reason of this Symptom is, that the pains are often felt at the ends of the Membranes; and we have Ex-am

Examples also of it in Rheumatism and Nephritis - Therefore Linnaeus has properly defined the Dolor Colicus, Dolor Umbilicus - Sauvages has also observed the same - It is this Dolor circa umbilicum torquens, joined with the acute fever, that characterizes Enteritis - Many Causes of Idiopa-thic Inflamation may here be imagined - The one most frequently observed, is that arising from Spasm, or the shutting the passage of the Intestines from any Cause - This is perhaps the Case 99 of 100 times; as it is so liable to be confounded with Ileus, or Ileus so constantly supposed to depend on Inflamation. I imagine rather that Inflamation sometimes supervenes upon violent Colics - But there are Colics attended with total inversion, so as to induce a vomiting of Stercoraceous matter & Clisters, without any Inflamation -

In so far as Enteritis does not depend on Fever, it is to be Cured by Bleeding, Warm Bathing and Clistering - Warm bathing is very universally employed; and when Semicupium is impracticable, we substitute fomentations of the Abdomen - Those of the Lower Extremities may relax the Spasm, or the Inflamatory affection of the Intestines, as we know that Cold applied to the feet often occasions it - There is occasion for Glisters in Gastritis, and more particularly in Enteritis - The Antiphlogistic Regimen may also be of use - On account of the Obstruction so frequent here, Purgatives are to be

be employed – The softest of these, are the Neutral Salts, as Refrigerants and Sedatives. I have reason to believe there is none better than one little known in this Country, the Oleum Recini. I have known an obstinate Costiveness, attended with violent Colic pains, which had subsisted for six weeks – It had been relieved by the alternate use of Opium and Laxatives: these last operated with great violence, and very much encreased the pain till they had brought down the hard faeces, on which the disorder depended – a Variety of Medicines were employed, till at length the Oleum Recini was tried, which operated with much less pain, and brought down two Scybala extremely hard – In this Case the Infla-mation was extremely great, and attended with feverish Fits – The only Indication remaining, was to remove the Cause of the Obstruction. It is necessary to determine, how long Bleeding, how spare Purgatives, are to be em-ployed, and when Opiates are to be given – These, you'll perceive, must depend upon the Circumstances of the Co-lic, together with those of the Inflamation

Hepatitis.

This is well Characterized with difficulty – "Pyrexia; Hypochondrii dextri tensio et dolor." But this is am-biguous, as the liver may also be inflamed on the left side, in which, therefore, pain may be felt without including the

Hepatitis - "Dolor sæpe pungens Pleuritici instar," allud-ing to this, that Hepatitis has often been confounded with Pleuritis, when the convex part of the Liver was affected; yet the pain is "sæpius obtusus"; - "Dolor ad Claviculam et Summum Humeri dextri." But the absence of this symptom does not exclude Hepatitis; and it seems to me to proceed from the Mediastinum being pulled down, chief-ly when the Inflamation is on the Convex side - But if the Inflamation be on the Concave side, that symptom is often wanting - and its presence does not admit Hepatitis. "Decubitus in Sinistrum Latus difficilis," from the weight augmented by the Inflamation - But the Infla-mation may be not so great as to occasion this; - therefore we have no certain Character of this disease - As for those that are added, they are but Symptomatic - But if our Characters are imperfect, those of other Systematics are more so - Savauges is remarkably imperfect - Linnæus does not mend the matter - Vogel indeed attempts some Im-provement on them, and the Character has added, "Ic-terus, interdum Vomitio Bilis et per alvum dejectio," deserves some attention. Boerhaave and others were very ready to characterize Hepatitis by the yellow color of the face - But this is by no means so frequent - We know that the yellow colour does not arise from a

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stoppage of the secretion, or retention of the materials of the Bile in the blood; but by its regurgitation, which is occasioned by Hepatitis extremely seldom - yet the "Color aurigenosus" is not quite without foundation, because the Hepatitis is often Symptomatic of Remittent fevers, which are attended with such a colour - The Character "Vomitio Bilis" is rare, being but a Symptoma Symptomatis, a Consequence of the Violent Vomiting - The same may be said of the "per alvum dejectio," which is still more rare. So much for the Character of the Disease.

With regard to the Theory, I reject entirely the supposition of Boerhaave, that it may be an affection either of the Vena Portarum or of the Arteria Hepatica. In Peripneumonia indeed the Arteria Pulmonalis may be affected also, though the Arteria Bronchialis is probably more affected - But in Hepatitis, as the Vena Portarum is quite inert, and cannot perform the active functions of an artery, the Impetus of the blood cannot be increased in it. - Another Opinion is the distinction here into Phlegmonoid and Erysipelatous Inflamation: for the Reasons above mentioned I cannot admit of this last; as there is in the Liver nothing analogous to the external Cuticle - But a distinction more important is that between Parenchymatous and Membranous Inflamations. It is said the former is more frequent here than

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any where else - But I would alledge that such parenchy-matous, deeply seated Inflamations come from Congestion in the Vena Portarum; and are hardly an object of our Practice as a primary disease - Hoffman says the Hepatitis vera hardly happens, and admits only the Spuria; which amounts to saying that the Hepatitis vera is a membranous affection - This disease occurs chiefly as a Symptom of Remittent Fevers in Warm Climates, especially in the East Indies - When it appears that this is not the Case, its Cure is the same as other Abdominal Inflamations, and chiefly turns on Bleed - but moderate purging is particularly necessary here; and also Warm Bathing and Blistering - Inflamatory Congestions often being found to depend on Remittents, a good Remedy, a posteriori, not from Theory, is the plentiful use of Mercury - see those who have had the Practice in the East Indies -

Splenitis.

Savauges says he has only met with two Cases of it, taken from Forrestus, an Author not very creditable either for his Judgement or his Veracity - With regard to its Character, other Pathologists differ from me - Linnaeus has put the Tetartophia; but this is merely theoretical - In the Opinion of the Antients, who thought that the Quartan Fever arose from Bile seated in the Spleen, it might be proper - Savauges says more properly, "Cum febre ut pluri-

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plurimum remittente &c; and among the Remittents the Quartan is but rare —

Nephritis

This most commonly arises from the Presence of Calculi or other Concretions — But doubtless it may sometimes arise without these — And I confess the Character I have given of it comprehends both the Nephralgia Calculosa and the Nephritis Inflamatoria — But others have not been more accurate. We may suspect Calculi in Persons of an hereditary Calculous Temperament, which is the same as that of the gout — not one of twenty that are early attacked with the Gout escape having Calculi sooner or later. When the Nephritis has been before preceeded by various disorder of the Stomach, a stone may be suspected, which may lie in the Kidney months before it discovers itself by its proper Symptoms — I know a person who never had nephritic Complaints, but yet various affections of the Stomach shew the presence of Calculi in the Urinary passages — When this disease is purely inflamatory, the pain and fever are connected as in other Inflamations; but in Calculous Nephritis the pain exists often a long time before the fever appears — This suffers total intermissions frequently, but the Nephritis Inflamatoria Remissions only — By these we distinguish the disease, and the Distinction is of Importance to the Cure — It is true that when the Inflamation is high, from whatever Cause depending, Bleeding is admissible — But in Calculous Cases Opium is more successful, though inadmissible in simple Inflamation — From the

the Connexion of the Kidneys with the Colon, a stag-nation of fæces or Flatus is to be avoided – Sydenham's Practice was chiefly Purging –

Cystitis

Its Diagnosis is not difficult, and its Cure re-quires no particular management – This disease is more within the influence of fomentations and Glisters. Any relaxation of the Rectum is readily communicated to the Bladder, which it is difficult to explain – In Stran-gury, Oil injected into the Rectum is a good Remedy.

Hysteritis

I prefer this Term to that of Metritis, which is more mysterious – The Characteristic Symptoms are commonly not well marked here; and the pain is slight – I have omitted here a symptom admitted by other Nosologists, the "Dolor in Lumbris et inguine," of Vogel and Sauvages – It might have been added, but it says no more than that an Inflammation of the Uterus is really communicated to the Ligaments – Lin-naeus adds some which are not so admissible, &c. Delirium, et Spasmus cardiacus – They may occur, but I have never seen these Symptoms – It is of Importance to distinguish Hysteritis from that which occurs in Childbed fevers, which does not admit of Bleeding – But when this Inflammation is simple, Bleeding is certainly necessary – Hysteritis is to be

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suspected

1. When there is some degree of pain and tension of the region of the Uterus and adjacent parts.
2. By the hardness and frequency of the Pulse
3 By the Os Uteri tactu dolenti.
4. By the more Laborious nature of the preceding birth—

Bleeding is then the Chief Remedy, which is to be directed by the Symptoms of Inflamation, by the degree of preceding Evacuations, &c.

We come next to the Articular Phlegmasiæ, the Rheumatism and Gout. Practice requires here a good Diagnosis; but our Nosologists have no where failed more. Vogel defines the Arthritis "Articulorum dolor" only; and Linnæus and Sauvages, as well as he, proceed on this false Theory, that Rheumatism is Musculorum dolor. Yet it is as much an Articulorum dolor as the Gout. And if it be alledged that in some Cases the pains shoot more along the muscles of the adjacent parts; I say this is not constant; and the Gout is as much encreased by the Motion of the adjacent muscles as the Rheumatism. Linnæus defines Rheumatism, "Musculorum dolor," and Arthritis, "Geniculorum dolor". A very loose and undetermined definition. On this account I have taken pains here to give Characters more Complete and Contracted. From considering them, I dare say you will, at least by a strong Presumption, distinguish

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then two diseases from each other in every Case - They are distinguished, then, by,

1. Their Causes. In 99 of 100 Rheumatisms we may con-depend on its Cause to be cold; whereas it is hardly discern-ed in any Case to induce Gout, of which the pain is almost always spontaneous - It is said that a strain frequently brings on both diseases; but a strain is often to be considered as a species of Rheumatism - and as for the Gout, we are apt to consider as a Cause whatever has preceeded it, and when attacked with it, it is common for People to look back three or four days to see what irregularity has been committed in eating, Drinking, &c.

2. By the Antecedentia - Rheumatism has none but the Cause itself - The Arthritis, on the contrary, is attended with affections of the stomach, generally at first, some loss of ap-petite, and then a keener appetite than usual.

3. By the part affected. In both Cases it is commonly the joints - But in 99 of 100 Cases the Rheumatism does not attack below the Ancles or Wrists, but more generally the knees, &c. It is the inverse of the Gout, though when it proceeds far it may affect all the joints; and here are many Irregularities, but generally the Character is good.

4. The pain of the Rheumatism is "Circa Articulos," in opposition to "dolor ad Articulum" in the Gout,

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because the Gout seldom attacks many Joints at once, or the Rheumatism a single one. The pain is more steady and fixt in the Gout; and when it shifts, the part formerly affected is relieved.

5. By the return of the disease. No doubt Rheumatism attacks some people for a long time, even for years; but as often or perhaps much oftner, it attacks but once, unless the Occasional Cause be renewed. This is a rare occurrence in the Gout, which returns spontaneously without evident Causes, and more regularly at stated Intervals. Hence different Nosologists have called it Dolor periodicus; but this is not accurate, because the returns are not determined and steady.

6. By their Connexion with the System. I had occasion in the Clinical Lectures some days ago to say, that I would not be positive that Rheumatism never occurred with affections of the Stomach; but this is extremely rare; but very frequent in the Gout, and often the only mark of the distinction.

7. By the time of life at which they attack. This character being difficult to express, and not absolute, is omitted. But the Gout attacks chiefly after the 35th year, or the Meridian of life. Occurrences of Gout more early are extremely rare: The Rheumatism, on the Contrary, seldom occurs in advanced age, or after the 35th year:

and

and the earlier the attack, the stronger the Presumption of Rheumatism

8. By the Temperament of the Patient - A Character more ambiguous still - Both diseases affect full and Plethoric habits; but Rheumatism more readily attacks Sanguine Temperaments, on whose skin there is a particular Nitor, and smoothness, though the Gout does not quite exclude these marks

Gen. XXII. Rheumatismus.

Char. "Morbus ab externa et plerumque evidente Causa; pyrexia; "dolor circa articulos, musculorum tractum sequens, genua et "reliquos majores, potius quam pedum vel manuum articulos "infestans."

This might with more propriety have been called Arthritis, had it not then have been liable to be confounded with the Gout - It is common to distinguish Rheumatism from Venereal and Scorbutic pains; but these can be confounded with Chronic Rheumatism only, of which shall treat hereafter - I might give you the history of the disease, but it would be unnecessary, as it has been so well described ever since the days of Sydenham.

Proximate Cause. I think this arises specially from the Consideration of the Remote Cause, and in that view I am disposed to say that previous to Rheumatism there is a Predisposition to it, a certain

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Constriction of the solids arising from Cold, or rather a peculiar modification of our Solids from Cold. This fact is generally admitted, but the proofs of it deserve our Consideration - I have said that I put the mean Temperature of the air at 62° of Farenheit. all Temperatures above that are felt warm, all below, cold. There are few climates which are constantly above or below this, but those which suffer the smallest variation come the nearest to it. But there are great variations in almost all Climates, though the degree Latitude distinguishes them pretty well; yet the West Coast of America is colder than the west Coast of England - The South West part of Ireland is less subject to Change than any part of Europe of the same parallel of Latitude - The coasts of China ~~are~~ colder than parallel Coasts in Europe - all this may influence the disease we are speaking of - Thus in Northern Climes, where the cold Temperature mostly prevails, Rheumatism is frequent - It is particularly so in England - Dr Lind has, in his list above mentioned, of his Patients in Haslar Hospital, 350 Rheumatisms and about 40 Pneumonic Inflamations - But below the middle Temperature, as at Minorca, we are told by Cleghorn, there are many Angina and Pneumonic Inflamations, but he mentions no Rheumatism - Hillary, who has given us an history of the diseases of Barbados for seven years, mentions very Spring Inflamatory disorders, such as

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Angina, Pneumonic Inflamations, &c; but there were only two years in which Rheumatism occurred, of which he speaks as being very rare there. Vid. P. 41. Men. March 1755. "This Month &c" — also pag. 109. "We also had some Inflamatory Rheumatisms, &c." — From all these it is sufficiently establised that Cold gives a Predisposition to Rheumatism. But we must observe that during the continuance of frost Rheumatism is rare, but frequent upon the coming of a Thaw — Whence we conclude that Rheumatism arises properly from a rarefaction of the fluids by heat, after previous constriction from Cold, or Vice Versa; and thus it is frequent in Autumn or Spring, but very seldom occurs in Summer or Winter. But it may occur in Climates not fitted for it, from the application of artificial heat or Cold — The same may be said of Seasons — Rarefaction after Constriction, or vice versa, may give a distension of the Vessels affected, which produces a sense of Resistance in the System — Every Sense of Resistance, produces Reaction. There is here therefore a reaction or encreased Impetus produced, — But, as in most Cases of Reaction, by the Intervention of Spasm and fever — Inflamations may arise from internal Stimuli, but it is confirmed by the consideration of this disease, that it may also arise from mere distension. The Diathesis Phlogistica, or encreased tone of the Arterial System, which accompanies Inflamation, I would say may be imputed to the affection of the Part, but is more

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probably owing to the previous Causes of general Constri-tion, subsisting in a great measure independant of the spasm of the affected part - I think the predisposition to Rheumatism is the same as to all other Inflamatory Diseases, where the Diathesis Phlogistica prevails, viz. Cold. But Pleuritis and Peripneumonia appear more frequently in warm Climates than in Cold - It is the contrary of Rheumatism. We may say that the warmth of the Climate, constantly keeping up the Action of the Extreme Vessels, may thus prevent Rheumatism - But why do Pleuritis and Peripneumonia appear especially there? Whatever it be owing to, it does not affect our general Conclusion, that the Diathesis Phlogistica is in Rheumatism the principal part of the disease - It is by this that we explain the shifting of the pains, which is the most remarkable Phenomenon of this disease - Whence we may conclude, that it subsists more by the general Diathesis than by the Topical affection - When it occurs in warm Climates or Seasons it will more readily attack those that are Sanguine, and subject to diseases from increased Impetus, and to Haemorrhages, than those that are Atrabilian and Choleric - Though an Inflamation, Rheumatism has the peculiarity that it is not liable to end in Suppuration, of which there is no example, except when accompanied with Phlegmones of the part - Boerhaave explains this by the less degree of Inflamation; but it is difficult to determine that degree: But he comes nearer to the point when he

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explains it in Consequence of the disease attacking a less Order of Vessels. I imagine Rheumatism does not tend to suppuration, because,

1. It affects Vessels not fitted for the suppuratory effusion

2. Because they are not disposed to the dilation necessary for such an Effusion - yet we learn from Dr Storck that there have been instances of Rheumatism accompanied with what he calls a Liquid Effusion, not disposed to suppuration.

Method of Cure.

We trust the Chief Cure of Rheumatism to Bleeding. I might explain the nature of this remedy here, but I am stopt by M. Lieutaud - It was said formerly that the French Practitioners were remarkable for their Excess in Bleeding - But now it seems they are in danger of running into the other Extreme. Lieutaud is one of these. He opposes Bleeding in Rheumatism, not from Experience, but from a very bold Theoretical Conclusion, Viz. That it is not an Inflammatory disease. Most People, however, in despite of Lieutaud, will imagine the Inflamatory Crust of the blood only, to be a sufficient proof of it. All the Symptoms and method of Cure of Rheumatism shew it to be an Inflamatory disease, and therefore it is here necessary to bleed according to the Constitution, habit, and former

bleed

bleeding, as much as the Patient can bear; though it has its limits. I have seen a moderate Rheumatism treated by a double Venesection, in both Arms, ad Animi Deliquium. This was excessive, and in danger, not of protracting the time, but of inducing debility, which more exposes to the Operation of Cold and a Relapse - If at first the disease yields a little to bleeding, and then reappears with Violence, Bleeding is again necessary - However, as I have seen more fault in Excess than deficiency, I used formerly to advise topical Bleedings, to avoid the danger of general Ones - But I am every day more and more doubtful of that practice - Experience indeed proves to me that topical bleedings may remove the topical affection pro tempore, but that the general Diathesis can be removed by general bleeding only - yet they are always of use when the pain is fixt and violent, because the topical affection is a considerable Irritation, which keeps up the disease; and generally have a good effect when there is a considerable redness and swelling of the Part - They may often be executed by Leeches when Scarification, and Cupping can-not be conveniently applied - But these will do more in half an hour than Leeches in three or four hours - All other Topical applications are of very little Consequence - The Rubefacientia can do little in removing general Diathesis; and though they may relieve the topical affection, yet they may induce a Metastasis of it, and perhaps with danger to the Internal parts, as I have sometimes seen.

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Blisters are proper only when the pain is very fixt, when there is a constant swelling, and when the Rheumatism threatens to become Chronic - But in other Cases we employ general Remidies; - and from the Diathesis Phlogistica prevailing here, we con-clude the antiphlogistic Regimen useful in all its parts - and therefore Animal food and all Irritations must be avoided - Sydenham advises the use of Whey, which is very Bland and nourishing - Whether the Dieta Aqua of the Italians should be employed here, is uncertain; at least it should not be given cold; but perhaps a consi-derable quantity of plain warm Water would do very well - We must also use any thing that tends to diminish the Tone of the System: Therefore,

Refrigerants or acids in great plenty - It is amazing to me how Physicians could view Rheumatism as an Effort of Nature to Hemorrhagy, and yet not have employed Refrigerants, so useful in Hemorrhagies - Nitre is the best of the Neutral Salts, as a Sedative, a gentle Laxative, and, as a saline matter, may promote Digestion.

Purgatives; I will not say they are of no use, but they are doubtful in Inflamations in general, and parti-cularly in this they cannot compensate for going to stool.

Sweating is not mentioned by Systematics. Rheumatic persons are liable to sweat in the begin-ning, and Practitioners tell us such Sweats are hurtful; but

but have not observed that such sweats often evidently relieved the Pains; which should have led them to the sweating method - Whether Dr Dover is the author of it, I cannot tell, but long before it was attributed to him Dr John Clerk used to make his Rheumatic Patients sweat, by wrapping them up in woollen Cloth, and assist-ing the sweating by warm Drink or Spiritus Mindereri. But the practice was not common here till the Invention of Dovers Powder, which was admitted into this Country only in Consequence of the Sweating method already employed - It was said that if the pains were not re-lieved after twelve or fifteen hours sweating they were aggravated - However this might be, the sweat-ing is now generally employed, and with more advantage than any other - at all times Opium has been consi-dered as a powerful Sudorific - and its danger in In-flamations is here taken of by its combination with an Emetic - according to the general Principle we have laid down, it should seem that Dovers powder should not be given before the Spasm is already re-solved by Bleeding - But Experience proves that Rheu-matism may thus be cured even when the fever is still subsisting, with much less bleeding than would other-wise be necessary. - Much of the success of the sweat-ing method depends on its administration - With regard to which take the following Cautions. -

1.

1. Sweating is to be carried on by putting the Patient in Flannel and wool, because Linen is a substance that soon loses its heat, and might thus dangerously check the Sweat - If the Patient declines this, I also decline often the Sweating altogather.

2. The Ipecacuana employed here is liable to excite Nausea, which, on drinking arises to Vomitus; by which the Remedy being thrown out, its effects are lost - Therefore the Patient should not drink, especially in the beginning; but drink is necessary after the stomach is settled, to render the Sweating sufficiently plentiful.

3. We must conduct the Sweat with as little heat as possible; - therefore we avoid assisting it by more bed-Cloaths than usual, except upon the Lower extremities - It is found that the sweat arising does not extend to the Lower Extremities; Therefore we must endeavour to extend it there by warm Bricks or additional Cloaths -

4. The Sweat conducted with as little heat, and therefore with as little anxiety as possible, must be continued for sometime - It is scarcely effectual after only twelve hours: I generally push it to twenty four; Dr Clerk to forty eight when he could - But is not easy and not always practi-cable - But I agree with Dr Chambers that the Patient should lie in bed all that time.

5. The Powder should be exhibited in the morning, and the Sweat excited in the day time; for in the night, besides the sleepiness of the Patient and inattention of the Nurse will

hardly

hardly prevent the access of Cold. I think that Sleep in general is unfavourable to Sweating - Perhaps you do not see the Reason why, but I think it obvious - During Sleep the action of the heart and Arteries is much diminished, as is also the Perspiration, according to late Experiments - Whence it is easy to understand that sweat should be prevented by sleep; and on other occasions Physicians have been aware of this - In the Cure of the Plague by Sweating, all Practitioners advise to prevent the Patients sleeping during the Sweating, which was continued a few hours only, but renewed by short Interpolations; but the Sleep was cautioned against till the second sweat was over, which was more than twelve hours; which I believe to be a truth taught by Experience - Some have Proposed to administer the Bark, to shorten the disease, upon what is called the Breaking of the Urine. I could raise doubts, but have no Experience of this - When Rheumatism is complicated with Remittent Fever, the Bark is certainly the proper Remedy; and even when not accompanied with Fever, but attended with Remissions only, I should suppose the Bark useful.

After the Acute Rheumatism, the Chronic may be considered as a Sequela - But this is difficult Subject; for how shall we give a previous Idea of the disease? It might be defined as consisting of pains of the Joints, along the course of the Muscles, encreased on motion and by the heat of the bed, without fever or Inflamation. But there pains exactly like these, arising not from acute Rheumatism, but from Venereal or Scorbutic Complaints.

I must refer entirely the distinction of these two diseases to the Concurrence of particular Symptoms - I dare not deter -mine whether the Chronic Rheumatism ever arises with -out the acute - But generally it arises from thence, and ap -pears to me to proceed from an atonia in the pained Joints, which is expressed by coldness in these Joints with a diffi -culty to sweat, or if the Sweat is excited, with cold sweats. A few days ago I had occasion in the Infirmary to treat of such a Case, and I gave reasons for considering it as an atonia. This arises from overstretching, which, from many analogies, we know to produce atonia - A Strain that has lasted for sometime, is no other than a Species of Chronic Rheumatism -

But how does this Atonia give pain? The only account we can give of it, is by saying that, the Paralytic state of the Vessels makes the Fibres or muscles enter into Contraction, particularly excited by the heat of the bed and the rarifaction and diminished gravity of the Air when the Weather Changes. From thence we see why Rheumatism so often ends in Paralytic affections, and, on the other hand, why Paralytic affections are so often attended with Pain - This Doctrine applies to the method of Cure, in which we em -ploy Medicines that tend to excite the action of the Vessels of the part -

1. To keep the part in constant warmth - I had lately a Rheumatic affection in my shoulder, which was entirely removed by wearing Flannel upon it - In acute Rheuma -tism

Rheumatism we say that nothing was more necessary to pre-vent a Relapse than defending the part by Flannels.

2. Warm Bathing. I am persuaded this had had no reputation in the Cure of Gout, but from its Curing Chronic Rheumatism – Use of the Flesh-Brush is also very proper.

3. Rubefacientia, Blisters, and Issues to the part. I will not deny that Perpetual Issues may be a useful Remedy; but from Experience I say that such a perpetual one is not so successful as the Renewal of Blisters. From the great num-ber of Vessels affected in the Sciatica, and from Experience, we have reason to conclude, that it is one of the most severe Cases of Chronic Rheumatism; yet Boerhaave Cured him-self of it by frequently renewed Blisters.

4. Cold Bathing. If this acts as a stimulant in Curing it, it will apply to our Doctrine. Frequent Exercise, Ges-tation, and particularly Riding, are here, as Pringle ob-serves, the most effectual Remedies.

Gen. XXIII. Arthritis.

Char. "Morbus sine causa externa evidente, sed praeunte "plerumque ventriculi affectione insolita; pyrexia; "dolor ad articulum et plerumque pedis pollicis, certe pe-"dum et manuum juncturis, potissimum infestans; "per intervalla revertens, et saepe cum ventriculi et in-"ternarum partium affectionibus alternans."

There are many diseases which may be called

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Opprobrium Medicorum, the chief of which is the Gout, both for Theory and Practice - As it is very important in our Pathological System, and as it frequently occurs it is diffi-cult to treat, it deserves our particular attention - It is distinguished from Rheumatism by generic Characters, all of which are susceptible of Exceptions.

1. By the age at which it attacks, being chiefly after 35.
2. By the peculiarity of the Temperament subjected to it. This shall be considered hereafter.
3. By the affections of the Stomach, that precede or concur with it.
4. By the absence of external Causes - This is the part of our Character which is most difficult, because the Gout often follows evident occasional Causes - But these are not perceived to affect directly the Joints, and to induce a topical affection - This Character is true when only in opposition to that of Rheumatism - We have instances of Cold producing the Gout, but rather from a general than a particular application; whereas in Rheumatism we most commonly perceive it topically applied.
5. By the part affected - In 9 of 10 Cases it is the foot: in 19 of 20 the hands or feet, not above the ancles or wrists. It is the contrary in Rheumatism.
6. By its periodical Return, - at first by long intervals, and

and afterwards more frequently; and even yearly in Spring or Autumn, though this is not general.

7. By its connexion with other parts of the System; indepen-dent of the Sanguiferous System, as the Stomach, &c. are affected.

One or other of these Characters will enable you to distinguish Gout from Rheumatism in 99 Cases of 100. But I allow there may still some irregularities and Anomalies.

As for the history of the disease, you have nothing more full and distinct than what Sydenham has given, and to him I refer you. Dr Martin Lister, an eminent Physician, partly cotemporary with Sydenham, ventures to say that the greatest part of Sydenhams history of this is nothing but a "bella et lepida Fictio." But however good a Naturalist Lister was, he appears to me to have had very little knowledge or judgement of diseases. Other Authors have assumed the his-tory of Sydenham, particularly Boerhaave, Hoffman, and Dr Ferdinando Warner, an Author, who, though not a Physician, was well acquainted with the Gout, under which he himself Laboured, and of which he wrote with Candour. Their Authori-ties are sufficient to support the history of Sydenham. Dr Warner observes that Sydenham has given a full history of the Regular Gout, but not of the Anomalous, which he says Dr Musgrave has well described. I readily believe he has described it better than any other author, but I think he has too much multiplied the varieties of the Anomalous Gout, which gives a suspicion, as he could receive no assistance

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from Authors, that one single life is not sufficient to amass so many Facts, and that he has been assisted by Fancy - But he owns that he proceeded on a kind of Analogical System.

With regard to the Theory of the Gout, it has hither to be imagined that it depends on a Morbific matter; and Stahl is the only Systematic Writer I know of that contradicts that Opinion, and attributes the Gout (see his Theoria vera) to motions of the System - after him, I am among the first who have refused that Theory; and by nothing have I suffered so much scandal, even in Print, as by this*. But notwithstanding the Abuses of my Enemies, I persist in my Doctrine, and Observe,

1. That the Opinion of a morbific matter here, is purely Hypothetical - 'Tis true that pretended Experiments have been brought, but were it necessary I could shew their Fallacy.

2. The difference of Opinion here, argues to the same purpose; Many Authors make it consist of a viscid Mucilage, others of a Saline, acid, Alkaline, or Tartareous matter - But not one of their Opinions is confirmed by any proof - There is only the opinion which makes the gout depend on the abundance of Earthy matter, which has the least probability for it; this being concluded from the Chalky Concretions that in the Joints, that sometimes occur after the Gout - But Dr Stahl gives many good reasons to shew that this is an effect rather than a cause, chiefly from its infrequency and the Lateness of its appearance

* Dr Home is particularly meant.

Appearance. The Opinion Morbific matter here, arose from that System of Pathology which admitted of no pain without a morbific matter - But now we know that pain may often arise from Distension, which, rather than obstructed fluids, gives pain in Tumors - and it still remains a question of fact, whether Inflamation the pain arises from Over-distension or from other Causes - But most probably it arises from Over-distension, especially in Arthritis - It is said that this disease is hereditary - But among hereditary diseases, though there some (perhaps one of ten only) which are conveyed by a particular ferment of a morbific matter, yet the rest arise from a peculiarity of Temperament transmitted from Father to Son - And there is this difference arising between these two, that the diseases arising from a particular taint or morbific matter, discover themselves very early, as the Lues Venerea, Scrophula - But those that depend on the Temperament discover themselves much later, as the Gout - Van Helmonts reason is very good - See a Dissertation of his on the Gout " Non ex Cru-ore &c."

2. They say the Arthritis is Contagious - If this were true, it would be a very strong Argument - But neither Sydenham nor Warner observed this - It is true Boerhaave does; - but consider the facts brought to support it by his Commentator, who in this, as in every Case, endeavours to support the Doctrine of his Master, and, as is sometimes

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the Case with great men, has made himself ridiculous by en-deavouring to support an Opinion by such frivolous and fool-ish Stories - A Dog sleeping on the feet of a gouty man was seized with it, while was so much relieved as to Laugh at the odd gestures of the Dog - Another, was that a Woman every time she sit in a certain Chair which her Gouty Brother had used, (though no other person was thus affected) was seized with the Gout, as if the Chair contained some Effluvia passed up to the woman, through Petticoats and all. Another - Two persons took the Gout from wearing Gouty mens shoes - Some Women have had the Gout from their gouty Husbands - There are thousands of Instances where it has never been thus communicated, which, though a Negative Argument, is sufficiently strong - But Van Swieten himself is very little Influenced by these facts, as it appears from his Conclusion, " Podagram non carere suspicione Contagionis, &c." Mere possibilities have often rendered Physicians very ridiculous -

Our Practice in the Gout is loose and Undeter-mined, and no one part of Regimen is free from disputes, which will remain till we have made greater progress in its Theory - If I cannot lead you to truth, I can point out the falsities of other Theories, and Initium sapientiæ est fugere Stultitiam.

The Supposition of a Morbific matter does not explain the Phenomena - For

1. No explanation is offered of its determination to the Joints

Joints; and these parts are not in the Course of any Se-cretories fit to convey Acrid fluids. The Synovia, which is the only fluid secreted there, is quite reabsorbed; and besides, the affection is external to the Ligaments of the Joints, and not in the Cavity itself - The distance from the heart will not apply universally - and on the other hand we have Rheuma-tic affections of the Joints with morbific matter.

2. On this Supposition, it is not easy to account for the Cir-cumstances of its Reabsorption - The Reabsorption of any fluid is possible, but not so sudden and Momentary as is here the Case, if that be the Cause.

3. Translations of Morbific matter so quick, so sudden, from the Toe to the Stomach, in less than half an hour, are not explained upon that supposition, especially since it can so easily be done by the Motions of the System.

4. We understand how the Causes of the Gout may affect the state of motion, but never how they can operate on a morbific matter -

5. When the Gout affects the state of the Stomach, what do we do? We employ powers fitted to remove Spasmo-dic affections, as Opium or Tonics, which cannot be ap-plied to a morbid matter; and we only attend to the state of motions. These doubts will be encreased in proportion as we shall establish any doctrine to supercede that of a mor-bific matter - To do this, I must prefix some Propositions.

1. The Gout is a general Disease, affecting the whole System - among diseases there are many that are

a.

α. That are topical, depending on some particular affection of an Organized part, in consequence of which the whole System comes to be affected -

β. Others which are called Local, do not affect the whole System, such as topical Inflamations without fever.

γ. Others which may be called Universal, act directly on the whole System and its general powers.

δ. Others, that might be called general, affect the whole System, but depend on a particular Constitution, and on a general state of the solids, fluids, and moving Powers - The Rheumatism may be induced more or less in any person: But, on the contrary, we know no such universal exciting Cause in the gout - It occurs only in persons of a particular Constitution - I would not imagine it necessary to suppose an hereditary temperament - That which is proper to the Gout may be acquired - That the Gout depends on a particular Temperament appears, because it affects men much more than women - 19 of 20 gouty persons are Men; and when it occurs in Women, it is rather in those of a masculine Constitution, called Viragines - all this is not universal, but there are few Rules without Exceptions. - But sometimes, as here, Exceptiones Confirmant Regulam. The Gout does not affect Eunuchs: this may be reputed a proof of morbific matter - But on the other hand, we say that the absence of semen virile, gives a feminine Constitution, as

as

appears in the Castrati.– It affects robust Constitutions, as men of a large size – And also Full habits, being more rare among the the lean and Meagre – It seldom affects Temperaments of a smooth and fine Skin – A Certain Coarseness is necessary; and if you give two persons, provided they are not pock-pitted, I will distinguish which of the two is most liable to the gout. It does not affect simple Temperaments – It is seldom that pure Sanguine or pure Atrabilarian Temperaments, though otherwise large and robust, are affected with Gout – But rather the Cholero-phlegmoniae. Those who are liable to Hæmorrhages and Phthisis are seldom subject to the Gout, though Hæmorrhoidarii are very frequently liable to it. But it is not the Sanguine Plethora that is concerned here, but their being liable to Congestions of the Vena Portarum – and so the Gout rather affects Phlegmonic-o-sanguine and indolent People. This leads me to observe that it affects chiefly the Luxurious and Indolent; that it is very far from being true, however, that all such are affected – There is here perhaps something hereditary necessary – But the Laborious and active are seldom gouty –

Intemperance in Drinking has been much insisted on, but I think it rather depends on that in Eating. As for what has been said, that Wise people are more gouty

gouty than others. I have seen so many Exceptions that I do not depend on the Rule. Besides the Gout is a morbus Ætatis, affecting only at a certain age, and therefore de-pending more on a general Constitution than on a mor-bid matter; which applies particularly to the heredi-tary Gout – Dr Warner, from his own Experience, believes the gouty matter is never quite expelled out of the body, because of the return of the fits before the matter could be supposed to have been renewed – This difficulty is found-ed on a Petitio Principii, and vanishes when we say the gout depends on a Diathesis, or disposition, of the Sys-tem, always present, which accounts for the Operation of the Causes he mentions much better than by supposing the act from a morbific matter – From all this it must appear that the Gout is a disease of the whole System, de-pending on a particular Temperament, either hereditary or acquired by long habit.

2. The Gout is a particular affection of the Nervous sys-tem – There are a few diseases that depend on the state of the matter of which our solids and fluids consist, such a Scur-vy Scrophula, &c: But those that do not depend on such an affection of the matter, may properly be called diseases of the nervous System – But there is here a difference to be made between Pyrexia affecting the Circulatory sys-tem – So Fevers affect the nervous System chiefly in its connexion with the Sanguiferous System – But here the

the affection is first in the nervous System, and may there remain long before it affects the Circulatory, so as to make the Gout almost a medium between Pyrexiæ and Neuroses, though the distinction between these is difficult. The striking Symptoms of the Gout belong to Pyrexiæ, but yet it does not particularly and necessarily attack the Sanguiferous System, and subsists long in the other parts of the system, as in the Alimentary Canal, with attacking the Sanguiferous System, and so far it belongs both to the Pyrexiæ and Neuroses The Gout, then, depends on the state of the moving powers, and on that of the Simple Solids, as affecting them - But in turn it may and often does make some change in the Simple Solids, or in the fluids, which is therefore to be considered as its Effect not its Cause - We know that the Gout is particularly a disease of the nervous System,

a From its Remote Causes, such as intemperance and Excess of Venery - Though this perhaps partly depends on an exhaustion of a fluid, yet it more particularly depends on the Nervous System, from a change of Tension.

B. From its Exciting Causes, such as intense study and application.

γ. From its Symptoms, and chiefly from the different affections of the Stomach, that particularly attend the atonic Gout.

But though the gout be properly an affection of the nervous System, yet commonly it is commu-nicated

Communicated to the Sanguiferous, and produces an In-flamation - This is what we call the Inflamatory state of the Gout - But often we perceive paroxysms of the Gout without such Inflamation, at least with only an Inflamation of short duration and force.

Another proof of the Connexion of the Gout with the Nervous System, is the great Influence the passions of the mind have upon it. Often they excite it, often they stop it, and they arise almost always in Consequence of it, so that Sydenham says the Gout is as much a Paroxysm of anger as of the Gout - Lastly, its connexion with all other diseases, from which it often arises, and which it often excites, tends to prove the same thing - But of all Symptoms expressing the Connexion of the Gout with the Nervous System, those of the Stomach are chiefly to be attended to - The Stomach is an Organ of sensation, endowed with a particular sensibility, and composed of a great number of Muscular fibres, so that it has a great connexion with the State of the Sensorium, in general with all other parts of the System; whence the different Systems of Authors concerning the Sympathy of the Stomach with all other parts - It has been common to explain this by the communication of Nerves in immediate Contact - I must not stop here to shew the insufficiency of this hypothesis - But we have a much better and a much more simple one, in saying that the different parts of the nervous System have a communication with each other, by the Intervention of their common Origin, the Sensorium - The nervous Sys

system is every where composed of a Medullary sub-stance, every where continuous, and therefore capable of propagating motions to the most distant parts — However, there may be a Communication of Nerves, such as above mentioned; but it is much easier to explain the Phenomena by the Intervention of the Sensorium - The Extremities of Sentient Nerves have certainly a Communication with the Sensorium, and this with the extremities of moving Nerves - Whence we draw this Conclusion, that every Extremity of the System may communicate with any other. e. g. The communication of the Stomach with the Surface of the body, is allowed by every one - But we know that many Causes contribute more particularly to affect the Extremities of the Surface - For,

1. Every change in the Circulation of the blood must affect them.
2. They are more particularly exposed, and therefore more readily affected by any temperature of the Air.
3. They are much more numerous than any where else, and consequently must be supposed much more connected with the Sensorium. It appears that whatever be the distance of the Parts, we may conceive them communicating with each other by the Intervention of the Brain. Motions are communicated from one part of the nervous system to any other, without a Translation of matter - a Pinch of Snuff excites Sneezing, yet no one imagines that the Snuff is carried to the brain, and thence to the

Nerves

Nerves of the Trunk - I knew the Case of a Lady who was subject to an alternation of Ophthalmia with pains of the Stomach - The connexion of the Stomach with the feet is particularly observed - Damp feet give pains of the Stomach - Van Helmont relates that one day when he was walking home with a keen appetite for his Dinner, he dislocated his ancle, which immediately produced Nausea; his ancle was restored, which returned his appetite and the good State of his Stomach - The stomach is also particularly affected by Coldness of the feet, whether spontaneous or brought on by External Causes - From whence it appears that the Gout may depend on affections of other parts, communicated to those in which it appears - Our Theory, you see, is much more simple and consistent with the human Oeconomy, than that of a morbific matter.

The Action of the Brain, which is the effect of the different states of the Extremeties of Nerves, is not always excited in Consequence of Impulse, but often in consequence of sensations of Consciousness from want of usual Tension or Impulse - This is the foundation of the αὐτοκράτεια or Vires Medicatrices Naturæ, sufficiently confirmed by facts, and therefore here admitted with the consent of all Physicians. It would be easily explained, if it were true, that a Reaction was never excited but in Consequence of an Impulse - But it is a fact that it often arises from want of Impulse -

I say

I say, then, that the Inflamation of the Gout depends on a Reaction of the System, in Consequence of an atonia. I proceed to the proof of this.

I. Gout always seemingly arises from Causes of Debility; it may be presumed that it is only in Consequence of this that it chiefly occurs in an advanced stage of Life, and in 1. the Luxurious and Indolent.

2. As Exercise is the chief support of the force of our System, any ailment in consequence of its neglect must be imputed to debility. But as all this depends much on habit. Certainly none are more liable to Gout than those, who after having been accustomed to exercise, have suddenly neglected it.

3. From Excess of Venery.

4. From Intemperance. It must be allowed that Debility is induced by too full Diet, as also by excessive watching. But the effects of this do not arise from the neglect of an Equilibrium between Sleep and Watching, but rather from the disturbance of nature or habit in the established for these two states.

5. From Study and Application of Mind.

6. From debilitating Passions.

7. From all Evacuations.

8. From the use of Acids.

These are the most of the Remote Causes of the Gout, and as they all Induce Debility, our Conclusion is confirmed by them.

II.

II. The Gout always Comes with Debility - This is attended with Coldness of the feet, independant of External Causes, with a Vacandi dulcedo, Formicatio, Subsultus Tendinum; all which might be shewn to be almost constant Consequences of Debility, and at least prove a debility in the Extremities - But there is also a general Debility of the whole System; for it appears that the Perspiration is diminished, from the Linen being much less fouled - a Confusion of head commonly occurs, so as to make studious men foretell the approach of the Gout, and on the contrary, its going off, by the Clearness of their Ideas returning - But chiefly the various affections of the Stomach, which be considered as the standard of the Nervous System, shew here a general debility and Atony - Therefore our Conclusion stands, as that Atonia is particularly determined to the Extremities. As to the other part of the Conclusion, that this is often followed by an Inflamation, is sufficiently clear from the Phenomena; but it has been too much insisted on as the leading symptom of the disease.

As for the Inflamatory state, it can scarce be doubted that there is an Inflamatory affection - It comes at the Season of other Inflamations - It attacks the proper Seat of Inflamation, viz. a Membraneous part - It attacks the same kind of membrane as the Rheumatism, though this has been doubted, as it is said, but without Proof, that the Gout attacks the Ligaments, and

and the Rheumatism the Aponeurosis; but both Reason-ing & dissection shews that the affection is on the Membrane immediately under the skin, and not in the Joints nor in the Ligaments. It is accompanied, like other Inflamations, with Tumor, redness, pain, and Crusted blood. As an Inflamation, it agrees exactly with Rheumatism. It differs from it by its Cause, its return, and its effects.

Another Conclusion with regard to the Gout is, that the whole of this disease does not depend on external and evident Causes alone, but on a certain Constitution of the System, which makes it liable to a Loss of Tone, and fitted for the Reaction produced by it. This is all I have to say on the Theory of the Gout, which I expect you will find more simple and more certainly determining our Practice. Take the supposition of a morbific matter to explain the Phenomena. I imagine you will find many difficulties in that work, and that you will be obliged to say, that matter induces an Atonia, in consequence of which an Inflamation is excited to Cure it; and thus the addition of a morbific matter gives no assistance in the Expla-nation of the disease, since we are obliged to attend only to the motions of the System in Consequence of it. Thus in the Meazles, though there is a morbific matter we attend only to its effects, viz. Catarrh and a general Diathesis. In short, our Theory will go as far as any other to explain the Phenomena.

Two

Two difficulties occur here, that deserve our attention, as they are concerned in our Conclusion.

1. Why does the Gout, though arising from Debility, attack chiefly large and Robust Persons? If the facts be true (and certainly they are) how are we to reconcile them? We are certain they are reconcileable, and I will make the attempt.

a. I say that Vigorous habits, on account of their Vigour, are more liable to a loss of Tone.

b. From the Tension of their System they are more liable to suffer from every deviation of it. There is some truth in these Principles; for nothing is more evident in our Œconomy than that there is a constant alternation of Excitement and Collapse, which last is in proportion to the former. Thus a person sleeps better after much exercise. Thus, I think, that persons liable to much Excitement in youth are more to Collapse in an advanced age, and must be better pleased with an indolent and sedentary life. Besides, from the Vigour of their System, independant of this, they are liable to other Causes of Debility. Thus Vigorous men are Salacious and gluttonous, and are more liable to Excess in Venery and Eating. Thus with regard to drinking, I know well that a persons by variety, Company, &c. may fall into Excess; but if he be weak, he will be immediately punished for it by sickness, and perhaps death. More vigorous persons are more slowly affected with, and

as

as they can bear more for the moment, they are in pro-portion more affected afterwards. When the Gout is come, if the general Diathesis be well formed, Low Diet, though it sometimes moderates the disease, does not expel it; and on the least Excess in full Living, there is constantly a considerable Relapse. Does not this shew that the vigour itself of the system makes it more liable to Debility? -

This leads to my second Argument, founded on this principle, that Equilibratum facile movitur. The Vigour of gouty people, who are generally plethoric and full, seems to depend on the Tension of their Vessels, in Consequence of their fullness - We know that this takes place differently in different Stages of Life - In youth the fullness is more in the Arterial System, and thus the tension of the System being more exquisite, makes the motions of the System more vigorous and Robust. But in an advanced period of Life, the fulness is more in the Nervous System, and produces debility and Loss of Tone. From hence we may conclude that Robust and Vigorous Persons, accustomed to a full Diet, should not suddenly change it for a Low one - The Vigorous and Robust, and very active in the early part of Life, are more liable to the Gout than the Indolent with the Gouty Diathesis -

2. Another Difficulty. - Why are the Inflamatory affections directed particularly to the Joints, and to certain Joints? - I think it is not difficult to perceive that when there is a general Atonia, it shews itself chiefly in the extreme

extreme Vessels, the most distant from the head (and heart), the chief source of the Energy and Tone of the Arterial System - Farther; These vessels in the Joints are few and very small - The Extremities of the Arterial System are more liable to Cold and other Causes of Debility - These Reasons seem to account for the determination of the Gout to the Joints - I might add that these Membranes, as membranes, are the proper seat of Inflamation; which is also applicable to Rheumatism. All this relates only to the Inflamatory and regular Gout; but we know that it is not always so, and therefore it will be proper to consider it also in its

Irregular State.

1. When atonia has taken place in the System without produc-ing an Inflamation or Reaction of the Brain. (Observe that I take all this on the footing of facts, without enquiring into their Cause) - There occurs in this state a variety of Symptoms of Debility and atonia of the System, determined to particular Viscera by particular Circumstances, not to be explained, and producing there Congestions, and, in consequence of these, Effusions, Dropsies &c.

2. When, after atonia, the reaction has taken place, but not in due force so as quite to restore the ballance of the System, a suspicion arises that an Atonia beginning in the Extreme Vessels, and not fully expelled from thence, may propagate itself to the Viscera, Stomach, and Brain, and cause Palsies, apoplexies, &c.

3. When the Inflamation is more particularly deter-

-mined

determined to some internal Viscus, as in Peripneumonia Arthritica, and not to the Extremities. How many Viscera this may affect, I know not, but suspect that an actual Inflamation of the Kidneys may often take place in Consequence of the Gout. It is in consequence of this, that few people attacked for sometime, escape Calculi. This has been explained, by saying that in the Gouty Diathesis there is a disposition in the blood to deposit Earth. Urine is the part of the blood most disposed to that deposition, and consequently Calculous Concretions must be found frequently in the Urinary Passages. Yet there are sometimes Chalky Concretions of the Joints. all the Concretions are to be considered as the Effects and not the Cause of Gout.

Though this Explanation may be good, there is a better. We may suppose that in Consequence of certain determinations of the motions of the blood in certain Vessels, the same separation arises independant of the constitution of the fluid, so that the earthy deposition is rather an effect than a Cause of the Gout. This may be proved by shewing that such Concretions happen only after particular determinations in the Vessels there. With regard to the Kidneys, it seems they have a particular ballance with the rest of the System, chiefly the Skin, so that when the perspiration diminishes, the

the Urine encreases, and vice versa. It may be said, how-ever, that this depends on the Serosity of the blood being augmented or diminished by these Excretions - But cold applied to the Extremities, particularly operates on the Bladder and Kidneys. I have seen from such a cause a flow of Urine similar to the Diabetes Hysteri-carum - The Kidneys, moreover, seem particularly con-nected with the rest of the System - We know that Nephri-tic complaints more particularly affect the Stomach, than do affections of other Viscera - Such a Connexion is very striking in the Gout - But observe that gouty and ne-phritic Complaints scarcely ever occur together, but alternately. I have seen a Gentleman who was long gouty, and in Consequence liable to Calculi: These two affections alternated with each other - at length he had a Strangury. We did not know whether it was the Strangurie senilis or Catarrhus Vesicæ, or whether it arose from a stone, of which other marks were wanting - at last purulent Discharges made their way from the Urethra and Peri-neum, attended with hectic Symptoms, Strangury, much pain and misery - He was at the same time seized with a fit of the Gout, which he had not had for the two last years - It attacked first one Toe, then another, and the whole of his other Complaints disappeared - His Urine flowed, the Pain vanished, and hectic symptoms were much diminished - It is enough to apply this in general to the above Conclusions - These alternations are a most

ver

certain proof that the disease depends on alternate deter-minations; whence I say it is probable that the Chalky Concretions in the Kidneys and the joints depend on the alternate determination, which gives room to such effusion as will separate the Earth; for in the other supposition we know nothing that should determine the earth to the joints - You may also ask what it is that particularly disposes to the Separation in the part affected? From several Experiments we now know that the gluten, or coagulable Lymph, is very liable to such a separation of Earth - Dr Butter told me that he had many such Experiments, but unhappily for us he is dead, and has not Published them - But Gaber gives many instances of this in his Experiments on Pus - We know that a part of the Coagulable Lymph is not dissolved, but only diffused in the Serum - and it is probable to me, that when an Effusion happens, either on the Joints or on the Kidneys, in consequence of Inflamation, it is that diffused part only which gives occasion to those chalky and Calculous Concretions.

CURE. In the first place, it has been disputed whether we should attempt a radical Cure of the Gout or not - It is very improbable that the Gout can be cured by any Medicines - If, according to our Doctrine, it is a disease of the Temperament, depending on every part of the System, and often congenial; it is not to be expected

that

that such men can be composed anew, and especially by Medicines, among which we know none that may be sup-posed to produce a total Change - Most of them are only partial, and often temporary - And thus we should be aware of such Quacks as pretend to have Specific Remedies against the Gout - But supposing the disease to depend on the Temperament, and even a congenial One (though the Tem-perament may not entirely be changed), it may, however, be mo-dified so as to obviate most of its bad effects - If the Gout be not always hereditary, but sometimes acquired, we may, by a Cause contrary to that which brought it on, expel it. Only give to your Gouty Patients much faith for your Orders, and by Regimen you may very much moderate the vio-lence of the disease, and perhaps expel it entirely - I shall here speak of three States of the Gout.

1. When it is only by Predisposition, known by the Tempe-rament, &c.
2. When it is more certainly known to exist in a regular and Inflamatory form.
3. When it becomes atonic and irregular.

With regard to the first, when the predis-position only, and not the Gout, appears, there may be a great Source of fallacy, by which I have fre-quently been deceived, though often not. Yet I have

knows

know a few persons who, remembering the miseries their Parents laboured under from the Gout, have been willing to every thing to prevent it in themselves. I conclude from our Doctrine that Labour and Abstinence are the best Prophylaxis. For one man living in Ease and Luxury, there are fifty who are doomed to Labour and Abstinence, and as the Gout does not attack these fifty, some of whom we may suppose to have derived from their Parents the gouty Constitution, Labour and Abstinence have been their Prophylactics against it. It is not probable, however, that such people in contradiction to their habits, Incli-nations, &c. will apply to such Remedies before they have felt the disease.

Therefore I pass to our second Cure of the gout, when actually existing in a regular and Inflamatory state. We subdivide this Article into two;-
1 Treating of what is to be done during the Intervals.
2. During the attack.

During the Intervals we employ Regimen or Remedies.

With regard to Regimen, our Indications are,
1. To prevent the fullness which disposes to atonia.
2. To obviate it, by supporting the Tone of the Vessels in general, and particularly those of the Joints, by such means

means as do not induce fulness.

3. To obviate Atonia by avoiding its Remote and occasio-nal Causes.

To Obiate Fulness. This is done chiefly by Abstinence - Nothing has been more frequently recommend-ed in the Gout than this, but it is not universally re-ceived, and it has been questioned whether it be not dan-gerous, as inducing Atony - This may be difficult to determine; but if this Course is begun early in Life, before the disease and Atony have appeared, the mea-sure is absolutely safe - Poor People may perhaps be subject to diseases which may be imputed to Atony from Abstinence; but as far as I can look into the history of Diseases of the Lower Class of people, I can find no foundation for this: and if there were any, it should rather be imputed to their Labour - On the Other hand, if you consider the great Variety of Arts-Zans, who use little bodily labour, yet escape the Gout, I think you must impute this to their Abstinence early begun.

I will try to compensate the length of my Theory by some useful Remarks in Practice. It is difficult to manage the Gout at pleasure -

Our

Our Patients indeed, when they feel the pain, are willing to swallow very disagreeable Drugs, but will not afterwards confine themselves to Regimen, which is the chief and most Important part of our Practice. When the Gout is already formed, it is ambiguous whither low Diet is useful by preventing fulness, or hurtful by disposing to atony - Low diet is probably very safe, when the disease has begun early in Life when the disease has begun early in Life, and when the vigour of the System is supposed still strong. But we should take Care that the System appear very strong and full, and that the Fits should have been very violent in an Inflamatory state - On the Contrary, when from an hereditary disposition, the Gout attacks Constitutions that do not appear very strong, or when atony already appears in an age pretty advanced, as upwards of fifty, a Low diet is dangerous -

Another Circumstance that may have Influence here, are the former habits of the Patient - If he have been accustomed to a moderate Low Diet, a Low diet is more safe - But if he have been accustomed to full Diet, it would be certainly dangerous to change it to the Low. In short, when the atony has already discovered itself, to prevent the Inflamatory Gout would be dangerous Practice - When we admit a Low diet, we must make a choice of the food - There are three Class of our Diet.

1.

1. The Lowest consists of herbs, succulent Roots, called Olera, and Fresh Fruits.

2. Farinacea and Milk are much more nourishing, and sufficient, I imagine, with moderate Exercise, to support the Tone of the System - They do not wear it out much, because they are soluble, easily perspirable, and give a Blood not dense and Elastic. The Inflamatory plethora depends rather on the quality than on the quantity of the blood, more, for Example, on the quantity of its red Globules and Coagulable Lymph, which Farinacea and milk are not proper to increase much.

3. The highest nourishing Diet consists most of animal food, which gives the plethoric fulness, and more of the Inflamatory Plethora. Diet will have different Effects, as the one or the other of these Classes is chosen -

The first is liable to be dangerous, on account of its weakness - The second will always do as well to prevent Fulness - The third will always be noxious. When the Symptoms of Atony are more remarkable, we should mix animal and Vegetable food; for though I have made but three Classes of Diet, yet, by combining them, there may be twenty - I would here take a mixture of animal and Vegetable food every day, the Trimming diet, as it is called - But more particularly I would advise,

a. That Meat Suppers be avoided - Sydenham advises no suppers at all; but this is never necessary nor even proper

proper; for wanting two meals, according the Scotch phrase, is to make the third a glutton.

3. To take animal food at dinner, but very moderately, and to make up the Meal by Vegetable Aliment. Even of Animal food there is a considerable choice. It differs, as being more or less soluble in the stomach, more or less stimulant to the System, or chiefly more or less Perspirable, which three heads give a great variety of it. But the chief se-curity comes here from the moderate quantity. A Measure of this is very difficult and is not to be ascertained but by the manner of Cornaro, viz, by weighing. With these Mea-sures we may admit some Animal food. To some weak sto-machs it is necessary.

As for Condiments, acids in general are hurt-ful to gouty Patients. As for Aromatics, Dr Warner ad-vises them, and that too of the warmest kind, as Guinea Pepper. I think it is doubtful whether all Aromatics, by frequent Repetition, do not destroy the Tone of the Stomach, where they are applied, and therefore become un-necessary, and probably hurtful. The transitory Stimulus of the Condiments of this Climate, as Mustard, Horse Raddish, &c. is more safe. But I think that the Aromatics or Con-diments of the Torrid Zone, are much more hurtful and dangerous. These seem to have been provided by Nature for People living on a Vegetable diet; but when it becomes necessary to employ a vegetable Diet in the Gout, the use of Aromatics would be, I think, at Cross-purposes.

As

As for Salt, I have really nothing to say on it. Nothing has been more frequent among Theoretical Physicians that to suppose that a saline matter is the matter of the Gout. But Dr Warner observes that he knew a Gentleman who lived almost entirely on this, without bad Consequences. The same may be said of Sailors, &c.

With regard to Drinking, it has been disputed whether avoiding Wine has not often been dangerous, chiefly when the Patient has been accustomed to it. I must answer this Question as I did that of Diet. But I would be less anxious about wine than about meat, as, if taken in a very moderate degree, it is never so dangerous. In Ambiguous Cases, a great deal will turn on the Quality of the Wine Employed. Acids, as I said, are hurtful, and therefore all Acescents are so too. Wines differ in this respect, and those liable to Acescency, a Claret, are more hurtful by this than useful by their stimulus. Madeira is much safer. I know a Gentleman liable to the Gout, who has always a degree of Nausea during the Fits, and in whom, at any time during the Interval, a Glass of Claret will bring on this Nausea. Therefore it is much safer to use strong Wines, and even Spirits, not capable of fermentation, and properly diluted, wherever a Stimulus is proper. Yet the Use of Spirits is a very dangerous Practice, increased by habit, and amounting at last to hurtful Intemperance. To conclude this Subject of Diet, I must observe that we should never

never break suddenly any former habits - Many Instances are brought of the Gout proving fatal by a sudden change of Diet. But I am perswaded that if a man subject to fits of the Gout in February, was to begin a moderate diet by degrees in the beginning of Summer, he would perhaps very safely prevent the Gout. It is still much more dangerous to pass from a Low diet to a full one.

Exercise. A late Italian Writer on the Gout, examines whether Exercise in general is necessary to human Life, and from many instances of Indolent Monks who have lived to a great age, he rather concludes for the Negative - But, besides that their Low Diet might contribute to this, when I consider the general scope of Nature, it seems that man was designed for an active Life - But to return to the Gout - Constant Gestation, as Sailing, will not prevent the Gout, since it often attacks Masters of Ships - Of all kinds of Gestation, Riding perhaps is the most useful, as giving more bodily Exercise: And in general bodily Exercise is by far the best - But it must not be too Violent - Neither Tennis nor Cricket are of use here; because from their Violence they are not durable, and are liable to bring on alternations of Excitement and Collapse - It is chiefly durable, moderate, bodily Exercise that is most useful, such as that

that of Labouring people; for if sometimes they seem to labour violently, yet as they are accustomed to it, it makes little odds to them — Bodily Exercise, unless joined to Moderate Diet, will not answer the purpose. I know persons that are constantly at Labour, who from full Diet and other Circumstances of fullness are not protected from the Gout. Nay Exercise in such a Case may be hurtful. I knew a Gouty man who avoided Exercise though advised to the Contrary, because it encreased his appetite. This is a mistake very frequent among our Rich Gouty Patients — and if the Exercise they take be too violent, it is liable to bring on a Collapse, chiefly if accompanied with full Diet. I knew a man who walked off his Gout, as he said, by Excessive Exercise at the approach of a Paroxysm, but the Paroxysm constantly encreased, resisted any Exercise, and at last was brought on by any little Excess of it. Habits of Exercise are also not to be neglected, and the sudden remission of this may be very hurtful. As Life advances, Exercise to be sure should be diminished, and a fuller Diet allowed. But this must be done by degrees, and Exercise should always be continued. In a low diet, the quantity may be left to the appetite, but in the highest we are constantly running to Excess, and there is no means of avoiding it but by weight and measure.

Our second Indication is, to restore the Tone of the System, by restoring strength without inducing fulness. As Wine and meat must be avoided, constant Exercise is almost the only means by which we can do this — But we must rule its alternations with rest and Sleep — It is the common Opinion that the due proportion of Sleep with watching is the only thing to be attended to; and that the hours at which it is taken are indifferent. The common prejudice is by Physicians to be false, but they do not know why — I say that our system is liable to certain peculiar revolutions of Excitement and Collapse, chiefly remarkable in the Sanguiferous System — The Pulse is slow during sleep and in the morning — It encreases till noon, then decreases till evening, at which time it arises again till two o'clock in the morning. The fore part of the night, when we have a kind of fever, is the most proper time for sleep — at 2 o'clock in the morning, i.e. at the height of the ~~Exacerbation~~, that the paroxysm of the Gout generally comes on; and it is improper that watching should at that time induce a morbid debility — Sydenham and others advise to rise early, to avoid much sleep; Boerhaave on the contrary advises the Somnus longus — I think the advice of Sydenham preferable, because much sleep induces the Plethoric state we want to avoid — Both these two first Indications may and commonly are neglected by gouty people; therefore there is use for a third

To remove external Causes of atonia im-

immediately preceeding the Paroxysm. Cold, if not transitorily employed so as to prove a Stimulus, weakens the System and destroys the Tone of the Vessels (chiefly of the Extremities) of the whole System, and therefore induces Atonia proper for Gout - The support of Perspiration and Circulation is the best means of removing the Gout - It attacks chiefly in winter, warmer Climates and seasons being more free from it - Cold is also often the Exciting Cause of Gout, and sometimes by the intervention of a Catarrh; from which it follows, that applications of cold, especially to the Lower Extremities, should be avoided by gouty people - But moreover, it is necessary to excite the action of the Extreme Vessels, so as to keep up their due perspiration - This is done

a. By Frictions, inducing heat on the part, and therefore a very proper Remedy for the gout. Sir William Temple, alluding to this, says that, no man who was not a slave, need be afraid of the Gout - I know an hundred people who practice it, but in the slightest manner only; whereas it should be moderate indeed, but continued for some time - When thus performed it has often alleviated extremely the Symptoms of the gout, and sometimes expelled it entirely.

b. By Warm Cloathing! Perhaps it would be useful to habitual men early to thin Cloathing, so as early to bear cold; But when a Valetudinarian morbid State is actually present, warm Cloathing is certainly necessary -

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Linnen is very well fitted indeed for cleanliness, but nothing is better fitted to give warmth than flannel, as frequently renewed as possible, that it may the better embibe the Perspiration.

V. By Warm Bathing - This has certainly good Effects in keeping up the Perspiration and heat; but as it is only Temporary, and as it relaxes too much, I doubt whether it be very useful in the Gout - Pediluvia may be of service, but they are often dangerous; yet when the Atonia is almost constant, Warm Bathing may be more useful.

A second Cause of Atony to be removed is Intemperance. With regard to Drink. Philosophers have much praised Intoxication, as bring mirth and Jolity. I will allow it has been useful in some Diseases, and to some people attended with present Impunity, and at some Seasons even in the gout - I know a Gouty Physician who is particularly fond of Wine - He found that in some seasons, as in summer after the vernal solstice, he could indulge it with Impunity; but in October or February a Couple of Claret would most certainly bring on the gout. If he escaped the Vernal Paroxysm, he would sing with Horace

However by these means the disease was encreased for life.
But Wine is destructive of our Oeconomy.

3. Excess of Venery has been alledged, and certainly is a very powerful means of bring on this disease, but is less

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in our power than any.

4. Another remote Cause, especially when there is a pre-disposition in the System, is Intense Study. Many of may perhaps have the gout hereafter, therefore study now, that you may avoid it then; Many however escape here, chiefly with a little Exercise &c. A particular kind of Study that may more easily be avoided, is Gaming, and chiefly those Games that require much attention, anxiety concerning the Termination, long watching, &c. are most noxious practices to gouty Persons - The Old (Sarah) Dutchess of Marlborough, who was obliged from the Gout to use Crutches, was much addicted to Gaming; and it is said when she was successful she often forgot her Crutches, and run down stairs without them; but when unsuccessful she could not get down Stairs without much help and difficulty - This passed for affectation, but I believe it true, from the Mind being more affected in one case than the other.

5. Every Excess in the Passions of the mind of every kind: Of the sedative, as such, and of the exciting ones, as disposing to Collapse - How these are to be avoided I leave to your Philosophy to determine - This finishes what I had to say under the head of Regimen, I come now to that of Remedies, and

I. The several Evacuations that are supposed to fulfill our first Indication.

1.

1. Bloodletting. Sydenham expects nothing from this- Hoffman, on the contrary, advises stated bleedings every third month - To determine this, as Bloodletting periodically stated is a powerful means of inducing Plethora, it is generally to be avoided - But when the plethora actually prevails, when the patient is young and vigorous, and in the first attacks of the gout, I should think Bleeding, if not frequently repeated, and if not combined with circumstances favouring a Plethoric state, may be very useful to moderate the Symptoms - But it is to be avoided in the following attacks, in old and weak Patients, &c. There was sometime ago in England one Dr Thomson, who set up for a great Practitioner, particularly in the Gout, and was much employed. He went so far at last as to publish his system - I am sorry that such reasoning as are contained therein should be passed on the Public for a work of Merit; and I am ashamed that Physic should be exposed to such affronts. He considers the Gout as an Inflamatory disease, to be treated like all other Inflamations, by free and repeated Bleedings - He is much praised in Fieldings Amelia; but I know nothing more weak and apt to mislead than his Writings - I have had many of his Patients under my care, and know that he could not always practice according to his own system, by such Bleedings, which in many Cases he found hurtful.

2.

2. Purging. Sydenham and Leister here disagree, and each offers facts in support of his opinion. Who shall decide when Doctors disagree? I can decide between the Doctors, but it is very difficult to decide between opposite facts. If the system be full and strong, Purging may be useful; but when weak, it may be dangerous, and may often determine to a return of the Plethora - yet there are many Circumstances in which they may be proper.

The Gout is made up of Contrary Parts, Atony and Inflamation - any thing weakening the system will often bring it on - But on the other hand there is an Inflamation that makes the Violence of the symptoms, and when high may bring on greater Collapse. Hence comes the Difficulty - Bleeding, if with Thompson we consider the disease as a simple Inflamation, will paliate the Symptoms, but may protract the disease by encreasing the Cause - Remedies often Contraindicate each other - On the other hand, there are Practitioners who will not admit bleeding in any Case of the Gout - There is an Inflamatory state of the gout, in which it is determined to the internal Viscera - In this Case bleeding is the only Remidy that can save the Life of the Patient - At the same time, as the gouty Constitution is really an Inflamatory one, they may be subject to other Inflamations independant of the gout, and then bleeding is certainly necessary for

as much as in other People. As for Purging, with regard to the System, and with a view to diminish Plethora, it can hardly be proper in the gout; as it may bring on a hurtful debility - But with regard to the Primæ Viæ it is sometimes very proper and necessary - all Crudities there, every degree of Stagnation, every degree of Costiveness which produces them, are all hurtful, and must be removed by Purging - Whenever from Circumstances of an Indolent Life, &c. there are abdominal Congestions, Purging may be very necessary to Gouty people - This is enough on Bleeding and Purging - There are other Remedies commonly ranged under the Title of Evacuation, but rather belonging to our second Indication.

II. To support the Tone of the System.

1. Vomiting is applicable to the Gout in several respects - As the gout is often introduced and marked by an atony of the Stomach, its effects there are Acidities and Crudities - There is hardly any doubt of these being hurtful, by encreasing the atony from which they proceed - In such Cases Vomiting merely by clearing the Stomach, may prevent the Paroxysm. But besides, it is a means of encreasing the strength of the Stomach, and therefore I have no doubt but that frequent Vomiting often relieves the Gout - But est modus in Rebus, and pushed a little too far I know it weakens the Stomach and destroys its tone - Particularly Washing the Stomach by warm Liquors, is one of the

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Occasions in which I know that Vomiting Weakens the Tone of the Stomach; and it is a great mistake to ima-gine that the absence of a Stimulus renders the prac-tice of vomiting safe - Ten grains of Ipecacuana do not weaken the Stomach so much as drinking several quarts of warm water. - Besides, Vomiting has a power of deter-mining to the Extreme Vessels or to the Surface; and by thus keeping up the Perspiration it may support the Tone of the System and prevent the Paroxysm - But there are some Cautions to be used here e. g. Vomiting is of no use in the Morning, when the Patient is to go into the cold air soon after, as that encreases and deter-mines the Collapse following the Excitement; therefore he should keep his Chamber - I have know Persons li-able to the Gout, who by the frequent use of Vomits, have protracted their Lives without being attacked by the gout - Others have removed the violence of the Dis-ease - and this is taken notice of by many Writers.

2. Sweating Sydenham and Boerhaave have both agreed in declaring against Bleeding, Purging, and Vo-miting, yet they both have shewed some favour to Sweating - As this is always the Consequence of a more vigorous determination to the Extreme Vessels, it may from hence be concluded more useful than Purging. But the Observation of Sydenham is just, that if it be pushed on by Inflamatory means, it is very hurtful,

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as encreasing the Inflamatory Diathesis - However, it is possible to excite it so as to avoid that Circumstance. Sweating has been observed by Sanctorius to diminish Perspiration - Perhaps because it exposes to a Collapse of the Extreme Vessels, proportioned to their Previous Ex-citement; or at least, as predisposing to the action of Cold - Therefore we must not allow the System to subside after it; but external Cold must be avoided for a long time after - If these Cautions be necessary (and they are) you may observe how precarious is the use of sweating in the gout, and how often it has been blamed with reason. Sweating cannot give that Constant Excitement of the Extreme Arteries, nor that firmness of Tone to the whole System, which alone can radically cure the Disease - yet there are Circumstances in which it may be necessary and serviceable, as in more advanced age or more atonic Systems, where there are many frequently repeated, but imperfect Paroxysms, in which Sweating may give relief (perhaps temporary only), and dispose to make other Remedies act more readily - It is a practice among some Physicians to excite a moderate Sweat, which with particular Care is directed to the Lower Extremi-ties, while the superiour ones are allow not to sweat. This practice pursued for a considerable, even to weeks and months, has given great relief - It was chiefly recommend-ed by Boerhaave in very atonic and irregular States of the Gout - I have been acquainted with many persons treated by him in that manner - I knew a Gentleman who

who had neither any violent Fits, nor any considerable Symptom of Atonia, which I imputed to this practice of lying in bed at the approach of the Paroxysm, with very moderate warm drinking, till sweat came on and entirely removed it.

Next of Medicines administred in the Gout, but under what Indication I do not know. Alkalies and Absorbent Earths have often been found of singular service in Nephritic and calculous affections - and after what has been said of their affinity with the Gout, we would readily think them useful in the gout also - But we do not rely on this analogy - There are facts proving their use here; and was long ago a Practice, but seems not to have been prosecuted. I know Instances of their having relieved both Nephritic and Gouty Complaints - But how do they Operate? In Cases of Calculi Physicians have thought that they operate by Solution; but this I think improbable, as often absorbent Earths have as much effect as Alkalies - It is probable that they operate by a quality common to both, viz. that of absorbing acids - Respecting this disease, it is very easy to explain their action thus - as acids in the Stomach have often been found to bring on Paroxysms, the absorption of these acids may prevent them - But it is still doubtful to what length they may be pushed. Huxham and others allege that in Nephritic Cases, their long use has been pernicious in the system; but in the Gout we have no such observation.

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Bitters. These are a very antient Remidy, known from Galen downwards, and probably long before - I re-fer you to a paper of Cleghorns on this in 1. Vol. Lond. Med. Es. There you will find a great number of Remidies under various shapes, but generally agreeing as Bitters - With regard to their use, I think there is no doubt of it in many Cases, since they gave great relief to the Duke of Portland, and have been much used after him under the Name of Portland's Powder. It is possible they have been employed without any immediate bad Consequences, but after sometime they are commonly attended with the most pernicious and fatal effects - I have know twelve persons at least in Scotland who died within three years after their use, with Circumstances pretty uniform, of Dropsy, apoplex-ia, &c. as Ascites, Hydrops pectoris, serous Effusions in the Brain, and Palsies, all shewing a great Atony of the System - How they operate I cannot well deter-mine - Whether the frequent and too violent Excite-ment of the Tone of the System, does not at length destroy the Tone of the System altogather; or whether, while in their first Operations they seem to excite the Tone of the System, they have not a Narcotic quality distructive of it - Whatever may be their Opera-tion, I have no doubt but they at length bring on a Loss of Tone, discovered from the diseases induced by their use, and by the Dissections, shewing Congestions in

in Consequence of them - Is not this applicable also to the Cure of the Bark? I think I know Instances where frequently used it has had the same effects with Portlands Powder - These Examples would deter us, it seems, from all Specifics in the Gout, and indeed it is an Opinion now prevailing here, that the Gout cannot be cured without bringing on worse diseases - Yet there is now at Liege one M. La Fevre, who has the Reputation of Curing the Gout in a very short manner, by a very simple Specific - 30 Doses of a white insipid powder given for ten days success-ively, and then with Intermissions, perform the Cure entirely; and for these he takes 100 Guineas - He has been offered £1000 to come to London for three months; But the Magistrates of Leige have secured him by a good Pension. I have just now in my Pocket Reports of his wonderful Cures - I know a Gentleman who was my Patient, and in such a state that he could scarce walk across the street, who now, after having been in his hands, he walks 8 or 10 miles without Incon-venience - But these Cures were began in 1767. and we must suspend our Judgement about them; but to me, more cannot be said against a Medicine than that it Cures the Gout.

We have spoke of the Regimen and Re-medies that may be employed in the Intervals of the Inflamatory Gout, either to prevent the return of the Pa-roxy

Paroxysms, or at least to moderate their frequency and Vio-lence. I come next the Remedies employed on the first perception of the approach, or immediately upon the Parox-ysm going off. If the Paroxysm be perceived by the af-fections of the Stomach, it will be of use to cleanse it. But this must be done by a stimulus, that may operate also on the Whole System, by determining to the Extremities. If Costiveness appears at the same time, the belly must be opened; and if it be before the Inflamation, it must be done by warm Aromatics. If the fit is not pre-vented, and if Costiveness still prevails, it is proper to take of that Irritation by Laxatives, misly by the most cooling and antiphlogistic; but more safely by Glisters. In short, we must attend to the Costiveness during the whole fit; but Laxatives should be employed only to keep the belly open, as all Purging is improper. If after the fit is come on, affections of the Stomach, Nausea, &c continue, Vomit-ing must be employed, not only so as to operate on the Sto-mach, but also so as to be useful in feverish Cases, of which the Gout is one. I have no Experience of Tartar Eme-tic in these Cases, but should think it useful. In fits of the Gout, we must moderate the Inflamation, which is a necessary part of the disease indeed, but not in an high degree, as it thus weakens the System and disposes to a relapse; and therefore we must moderate it by all the parts of the Antiphlogistic Regimen. In the first attacks of the Gout

gout, if it happens to young (under 45) and vigorous persons, where there is no Symptom of the atonic state, the antiphlogistic Regimen must be observed with rigour. No meat nor Wine is to be allowed - But where the Patient is old, and the disease of long standing, and especially when atony of the Stomach appears, Light Broths and a moderate Portion of Wine may be allowed - When the Antiphlogistic Regimen is necessary, Bleeding is admissible also, but it must be confined to the cent, the patient being young, and no Symptom of atony appearing - I mean here general Bleeding - But it is a difficult Question whether topical Bleedings on the part affected are also useful - This is an antient Practice, warmly recommended by many Moderns, and in a few instances I have known it of use; but they are few, and though we have also the Authority of Hoff-man, they are not sufficient to support the practice, of which I have still doubt - Perhaps there is a rule that will apply here, viz. to apply topical Bleeding as in Rheuma-tism, when the swelling and redness are considerable; because there are marks that the Inflammation is come to its due degree, and that it may be remitted.

Topical Applications have been recom-mended by many, but blamed by many more. These are in general, Emollients, Antispasmodics, Narcotics,

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Rubefacients, Blistering, &c all these are truely capa-ble of removing the pain of the Gout, and have all upon occasion been employed without any bad Consequences, but all of them also have been employed with very fatal Consequences - I have known very unhappy Effects by the use of Emollients or Warmbathing. From common theory we scarce conceive how these can expel the morbific matter - Refrigerants and Narcotics are still more mis-chievous, and all of them very dangerous - In this ambi-guity we have no means pointed out to expect a good or bad effect from them; and still there are some we can-not use without doubt and diffidence - In short, the fre-quency of the bad effects will always determine against their use - Nothing but the most violent pain can di-rect us to employ them; and there is here a nicety we have not yet perceived - However it is very probable that the Vessels of the joins affected are truely in balance with the rest of the System, and that therefore an atony of them must more or less affect other parts - When the Atony has been far, perhaps the Inflammation is the only Remidy; and whatever takes it off before it has arrived to its due degree, must increase the atony of the whole System - From all this you will not be surprized if even gouty people well know, that no ap-plication is useful, except Patience and warm Flannel.

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But if Anodyne Applications be dangerous, are other shapes of Anodynes useful? or in other words, is Opium admissible? There is no one so near making Opium an Universal Remedy as Sydenham; yet he owns it is frequently attended with bad Consequences, and is not to be admitted without the greatest diffidence - For my part, I would say that the violence of the pain itself would prevent from using Opium, as it makes the violence of the Inflamation, which, as in other Inflamations, Opium will aggrevate - I have seen it give restless nights and much aggravate the Inflamation. In short, if it be admissible at all, it is after the violence of the pain of the first Paroxysm is over, or rather, not till the Tumor is well formed, with a view to moderate the violence of subsequent Paroxysms. No body has been a warmer Advocate for this practice than Dr Warner; but he supports it with extremely bad reasoning - Opium must not be frequently employed, as it at last weakens the Tone of the System and destroys it entirely - But this is no objection against its moderate and unfrequent use. Besides Physicians, I have known Gentlemen who often employed Drinking towards the end of the Paroxysm, often with impunity, but more often with a fatal Protraction of the disease. Besides these Remedies, the Return to Exercise immediately after the Paroxysm is the best; and Sydenham has taught us that this is the properest means of taking off the dregs of the gout - But it is a hazardous remedy to move the Limbs too much, especially in persons who have been long affected, and are not accustomed to exer-
-cise

Exercise – yet this does not affect the Practice of Syden-ham by Gestation or riding on horseback, which are very good.

The Atonic Gout is by far the most dif-ficult part of our subject – As I have here no assistance, not even from Musgrave, I will give you what appears to me to be probable – There are two Cases of atonic Gout.

I. That in which it is irregular.

II. That in which it is more strictly ~~atonic~~ atonic

The irregular Gout is attended ~~with~~

1. With Inflamation, but of internal parts – It is marked by the same symptoms as other ~~Idiopathic~~ Inflamations of those parts, and is to be treated by the same Remidies. Thus the Arthritis Peripneumonica is to be treated by free Bleedings &c.

2. The Atonic Gout is of two kinds. When Atony is the only foundation of the disease, and encreases to a great degree without Inflamation – It is difficult to Characterize this, and to distinguish it from Hysteria, Hypochondriasis, or other such affections of the Stomach. But when this appears in persons of an hereditary gouty Constitution, of a gouty Temperament, or when it follows imperfect fits of the Gout in an Inflamatory state, &c. we suspect the Gout –

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As for the Cure, it is to be obtained by going to warm Climates - When we see how often gouty People are affected in winter, and how free they are in Summer, we must here attribute much to cold; and when our Patient cannot go to a warmer Climate, it must be our particularity to make him avoid cold by Stocks of Flannel, stocking of Beaver Skin, Flannel Drawers, &c.

2. Avoiding Causes of Atony, such as Intemperance, Venery, drinking, Passions, hard Study, &c.

3. Exercise, which must be moderate, but constant. Thus in Gestation we see how Long Journies are more useful than simple Airings.

4. Much Friction; - as above observed.

5. Warm Bathing, certainly admissible in an atonic state, and often attended with good Effects.

6. Moderate Sweating, particularly determined to the Lower Extremities.

7. All means of keeping up the Tone of the Stomach - Moderate use of Wine and Aromatics - It is difficult to say whether this is also to be done by more food - at least it is more dangerous than a moderate use of Wine - But we must avoid Acids, even in the wine we employ.

8. We take Care of the Primæ viæ by Vomiting, Purging; and by Alkalies when acescency prevails.

9. Particular Prescriptions, such as Bitters, Portlands Pow

Powder, and Bark, in a moderate quantity, and for a short time. But these are ambiguous– But we may with safety employ Chalybeates, which are agreed by by all Writers to be the principal Remedy when Atony Prevails–

10. We Imitate the Inflamation by Rubefacientia, Blisters, Issues, &c. applied to the Lower Extremities. But these are doubtful, and I have, I think, particular observations against the use of Issues– yet Blisters may perhaps be sometimes useful.–

The Second Case of Atonic Gout, called Retroceeded Gout, or Goutte remontée, is when the Inflamation has proceeded, but being stopt, goes to other parts, as we have seen before; or is followed by more considerable and sudden Symptoms of atonia. As the tone of the System has been excited in the Inflamatory state, the Collapse of the Extremities will be propagated with more effect to the rest of the System– With regard to the Cure. These Cases cannot be treated only by keeping up the Tone, or avoiding Remote Causes, But are immediately to be relieved by Stimuli combined with Antispasmodics, such as Volatile Alkali, which by itself perhaps would do, but more certainly if combined with Musk, Camphora, &c. Such also is Brandy taken in unusual quantity. It is remarkable that a person affected with violent Spasm of the Stomach in consequence of the gout, will not be intoxicated by six times more

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Liquor than he otherwise could have borne. The Expla-nation of this I dare not enter upon - This finishes what we had to offer on the Gout, and with it the Phleg-masiæ; They have taken more time than I expected; but I have endeavoured to give you something Scientific, that you can lay hold on; - not a mere Theory; but rather a Collection of General facts.

Ord. III. Exanthemata.

First of the Character of the Order - The mean-ing of ours is obvious "Post Febrem phlegmasiæ." By determining them to be Phlegmasiæ, we distinguish them from many other Cutaneous Affections that are not so - "Post febrem" distinguishes them from proper Inflamations which are, if not the Cause, at least congenial with the fever - Whereas Exanthe-mata exist only in Consequence of a previous fever. "Plerumque Phlegmonæ plures exiguæ "per Cutem sparsæ!" I own however the pure Phlegmasiæ have sometimes arose after the fever. There are instances of Pleuritis and Rheumatis-mus appearing not till twenty four hours after the fever; and on the other hand, there are in-stances of Exanthemata appearing before the fever - These are but rare; and there is scarcely

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an instance of a Phlegmasia, in which the topical pain did not occasion some particular symptom from the beginning, as in such a Pleuritis, cough and Dyspepsia - In Phlegmasia the substance of the disease is a topical affection, of which the fever is a symptom. In Exanthemata the Cause is diffused over the whole system, and produces the general symptoms of fever, in consequence of which the Eruption is produced - This may be a Theory, but it will assist us in marking the proper distinguishing Characters - In short Exanthemata are a general affection, which the effort of a fever; whereas Phlegmasia are topical affections producing fever - There are two Causes of Exanthemata.

1. When a forreign matter is introduced into the Body. We know it is so, because we can trace the Contagion - This matter brings on a fever, followed more or less by an Eruption - There has been an Opinion, supported by Sydenham, that there is a variolous fever without Variola - But this is a very rare Case - It is said also that there is a Febris Morbillosa, but I have never seen such, without Eruption of Measles -

2. When the Disease is not a Contagion, but exists sporadically; or if there be a Contagion, it does not produce an Eruption regularly determined and constantly appearing in the same period

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as others — This is the most common Case of Erysipe-las — But in such Exanthemata the Eruption is to be considered as an accidental Circumstance, not essentially depending on the foreign matter introduced — Thus the Petechial fevers, which are Epidemic, are not always attended with Eruption: and this is very irregular and un-determined. Thus also miliary Eruptions do not always attend Miliary fever — They are irregular, and can often be traced to the Circumstances on which they depend, as Sweating — The Exanthemata of the first kind are the proper Exanthemata — Those of the second are to be considered only as fevers with Eruption — In the first there is a foreign matter introduced, on which a determined and regular fever depends, and which deter-mines the whole Course of the disease — In the second there is perhaps a foreign matter too, but it does not determine the disease, and more particularly produces fever, the Eruption not being essential. The Idiopathic Exanthemata affect the same person only once in life. Whether this is universally applicable, I dare not de-termine; but we shall hereafter have occasion to ex-amine it — So much on the Character of the Order.

Now for those of the Genera. These are to be distinguished,

1. By the Character of the Fever that attends them — There are some Exanthemata that are steady in this

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respect, but none that are absolutely so: so that this is by no means an absolute Character - There is a Variola Typhodes - There is a Pestis Benigna, attended with Synocha, not with Typhus -

2. By the Duration of the Fever and period of Eruption. There seems to be some Latitude in this respect, but take the whole of the Cases, and you will find a great uniformity in them - and we shall hereafter Whether this Character, incerto morbi die, will not give a Presumption against proper Exanthemata.

3. By the Difference of determination of the forreign matter - There are three determinations occurring.

a. The most general Case is a determination to the Skin, which may be explained by saying, that the forreign matter is fitted to unite with Perspiration.

b. Another determination as frequent, is that to Mucous gland, perhaps from a similarity of Perspirable matter, and the mucous secretion: But in some Cases also probably from a particular affinity to these Glands.

γ. a Determination to Lymphatic Glands - The matter may be in great abundance, and in Consequence enter the absorbents, and by its acrimony affect the Lymphatic Glands.

4. By the Nature of the Eruption - This may be of three kinds.

a. A serous effusion disposed to Suppuration.

B.

β. a Serous Effusion not disposed to Suppuration.

γ. a Matter not fluid, that soon takes a dry form of Scales or Furfuraceous matter.

5. By the part of the Body occupied - Thus Erysipelas affects one part only; and is, as Linnaeus says, Salutarius; whereas there are commonly Phlegmonæ plures exiguæ per cutem sparsæ - Of the great number of Exanthemata, while most of them affect the whole of the Body, particularly the Face, the Miliary Eruption attacks all parts except the face. This finishes what I had to offer upon the Exanthemata in general; I now come to particular Genera.

Gen. XXV. Erysipelas

The Character of this I have before considered fully, when treating of it as a topical affection; and from the Comparison I made, I imagine you will readily understand its Diagnosis, as a Topical affection. I must now add, that it is distinguished,

1. By its seat - In this respect there are two Species; for it is either a simple Inflamation of the Rete Mucosum, or it is combined with a Phlegmon, properly so called. But this occurs only in the Extremities, and never in the face.

2. By its Termination, which may be,

a. Into an imperceptible Effusion, soon changing to a

a furfuraceous matter.

β. In Phlyctena, or little Bags full of a fluid matter.

γ. In Blisters or large Vesicles.

3. But the chief distinction is the fever accompanying it — I have put only Synocha, but I believe there are many accompanied with Typhus, or putrid fever. Thus Anthrax is properly an Erysipelas: Sauvages has an Erysipelas Typhodes, but improperly called so, as the Characters do not mark a Typhus, but rather an Ardent disease. Frequently Erysipelas is attended with Fever, and frequently the fever supervenes upon it; But frequently also it supervenes upon the fever — This amounts to saying, that Erysipelas is not properly an Exanthemata, but a proper Phlegmasia — The last I had occasion to treat, had subsisted two days on the face without fever — Besides it is not commonly Epidemic or Contagious, but purely Sporadic. Linnæus considers it as the Protypus Exanthematum — as for Pestilent Cases, I have no Experience of them; and they are not so well described as to enable us to deter-mine whether they be proper Exanthemata or not. In all Cases I have been acquainted with, there appear-ed to be a proper Phlegmasia with Synocha, accom-panied with a Phlegmone terminating in Suppura-tion — I own, however, that Erysipelas differs from Phlegmasia,

1. By its spreading sometimes from the face to the neck, shoulders,

Arms

Arms, &c. This Circumstance I take to depend on the affection of the Rete Mucosum.

2. Its mobility. But I have seen no Instances of such Translation as this is supposed to infer: and with regard to those of other Practitioners, I think it doubtful whether the Translation were genuine, or only a different determination of the Diathesis Phlogistica, as I mentioned in Pleuritis and Rheumatismus. – One particular Translation especially spoke of, is when the Erysipelas affects the head, and is said to be translated from the Common Teguments to the Substance of the Brain – But this is not a proper Translation, but only a Communication arising from the connexion of the Two Carotids; and in such Cases I have never seen the two diseases existing separately, but together.

In entering upon Exanthemata, we began to consider the different genera: and first the Erysipelas – We have mentioned all the Circumstances relating to this, and were beginning to enter upon its Cure – There are two Species of it – first, where the Eruption is the Effort of the fever, which may be called Febris cum Exanthemate – The other where it is but a topical affection –

With regard to the first, the fever is the chief Circumstance to be attended to – I am not acquainted with many Cases of it, but suppose that it is generally a Typhus; and as I have no Experience of it, I confine myself to the Species of it most common in this Country –

This is to be considered and treated as a Phleg-

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Phlegmasia, by the Antiphlogistic Regimen, Bleeding, and, perhaps, Antiphlogistic Purges.

Bleeding. Erysipelas is so far from being considered as Exanthema, and to be necessarily produced by Fever, that most commonly the fever supervenes upon the topical affection; and that Bleeding is Extremely useful, as in all other Phlegmasia - Many disputes have arisen among Practitioners about Bleeding in Exanthemata, and no theory has ever been more pernicious to Physic, than that which supposed the fever was necessary to promote the Eruption. Hence Aromatics and powerful Stimulant Sudorifics have been given, and Bloodletting much avoided - But that Doctrine is now sufficiently Exploded -

External Applications in Erysipelas are chiefly Narcotics, Refrigerants, Spirits, Stimulants, Acids, and Emollients - all of them have been employed, and all of them have be objected to - Opium and other Narcotics, and Saccharum Saturni, are alledged to bring on Gangrene; - Spirits and Acids to encrease the Disease; - And Emollients to spread the Inflamation. All these Objections are more or less founded; and the most successful and safe are the Dry Operations, which are found here to be the most cooling - They are Earthy, such as Chalk or Meals, as the powder of Farinacea - But Chalk is liable to Concrete into a hard Crust - Mealy applications are the safest - Any kind may be employed, but the Coarsest, such as Oat-meal, are

are much better, as being less liable to Concrete. Fanugreke and a small quantity of Camphora may, for the sake of Formula, be safely and successfully added. In England Colewort Leaves have been found to alleviate the Inflamation without spreading it.

Gen. XXV. Pestis.

Char. "Typhus maxime contagiosa —— Incerto morbi die erup "tio bubonum vel anthracum."

This is one of the most fatal diseases, not only by it self, but also by the great disorder it introduces in Public affairs; and therefore very important. Besides, that, from this we derive very useful hints for the Theory of other diseases. It is commonly neglected in the Instruction of Youth, but without reason. My time does not allow me to treat it so fully as I would. But besides the authors that have themselves practiced upon it, you may Consult the Systematics, as Stahl, Hoffman, Mead. Some Questions of very great Importance arise here.

1. Is the Plague different from all other Diseases in Species or in Degree only? This is a question of very great Importance. It is true that there are other diseases, which in degree approach very near to the Plague. On other Occasions Bubones and other Symptoms have been found to accompany fevers. On the other hand, that disease never appears, but we can trace its introduction by Contagion from some other Country, and exhibiting in Consequence some particular Symptoms. In almost every part of the World there are Petechial fevers, in many they are accidental

Bubones

Bubones. But no disease has been observed such, except the Plague, that Bubones should occur in every individual attacked by it - and if we consider its history, we shall find that disease endemic only in Egypt and round about - Every where else we can trace the Contagion, and therefore we consider it as a Specific Disease.

2. As a specific disease, how is it distinguished? - and is it a proper Exanthemata? It is agreed that there is no certain characteristic mark of the Plague, but the Eruption of Bubones or Anthraces (Take notice that we take Bubo for a swelling of any Lymphatic Gland - In the Plague they occur sometimes in the Inguin, sometimes in the Axilla, &c.). The Character of the Synopsis is founded on this; for though may persons die of the Plague (as tis said, during its prevalence) without an Eruption, we have yet no reason to believe it really to be the Plague, but a similarity of symptoms with the general Epidemic, affecting others with Bubones and Carbuncles - Therefore, whenever Bubones and Carbuncles appear, there is a suspicion of the Plague; and when they are communicated by Contagion, it is almost certain - With regard to the other part of the Question, whether it be a proper Exanthemata? I say that Carbuncles

only

only are to be considered as Exanthema. I cannot conceive the matter deposited in the Lymphatic Glands from the Extremities of the Blood Vessels in those glands - From ana-logy we have more reason to believe it is deposited there from the Lymphatics - This infers a matter diffused thro' the whole System, which being disposed to an Exanthema under the Skin, produces Carbuncles - But I cannot consider them as proper Exanthemata, as they are few, never above a dozen, as you see in Chenau, and as this Eruption does not observe a regular period, as happens in proper Exanthemata. It is not without reason, then, that Vogel has taken it out of the Exanthemata, and called it Febris Pestilentialis. But it is not worth our while to contradict a popular Opinion, and therefore, with Savauges, I have left it amongst the Exanthemata, because if it is not a proper Exanthe-ma, there is here at least a regular and constant Determination.

3. Is the Plague truely a Contagious disease? I am surprized that such a question has been started - I refer you for the Arguments on both sides to the Traité de la Peste Published in Quar.° 1744. by the Order of the French Court, under the direction of Chicaneau, the first Physician; and what is more in its favour, was almost entirely Executed by

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sense. It is a Collection of different Pieces on thiques
-tion taken from the Plague of Marseilles - It is diffi
-cult to assign the Circumstances of Contagion. It is dif
-ficult to trace its progress - In many diseases arising
from it, it is marked by no Circumstances - But these are
only Negative facts, and cannot be opposed to the im
-mense number of Opposite Facts, proving it to be a Con
-tagion - and in the very Writers on the other side of the
other side of the question, it is owned that if some Instances
of Plague occur without Contagion, in most Cases
it may be traced - The Opinion of the Plague not being
a contagious disease, may quiet private people, and hinder
them from neglecting the Duties of humanity, which
should be performed at the hazard of life - But what
-ever it may be for private persons, it is very Impor
-tant for the Public to treat it as a contagion, notwith
-standing the private hardships resulting from thence,
which besides might perhaps be avoided - It is impor
-tant to oppose the Common Opinion, that the Plague
is diffused in the Air: We maintain that it is never
diffused in that way, as we know that a Line of Cir
-cumvallation will as certainly confine the Plague
as a flock of Sheep - In other Contagions we know
that the matter is active only as it arises from the
Patient or Cloathes that have been very near him;
but it never arises at a distance - We have been told
that Cloth impregnated with Pestiferous Effluvia,
burnt

burnt on the Windward side of a Town, communicated the Plague to its inhabitants, while no one was affected on the Leeward - We have an Example of this kind in the Jail-Fever, which is said to have affected the Judges on one side of the Bench only, where a stream of Air was directed from the Prisoners - Many Physicians have been of opinion that the Plague was produced by fear alone. I am not surprized to find that opinion in Van Helmont, a visionary Physician, who placed all diseases in affections of the Soul: But I am surprised at Riverius, who published at Leipsic a Treatise. de la Peste, which you must read among others. He gives there many instances of Plague arising without Contagion; negative facts only, as we observed before - And he adds "Sancti testor sine nunquam vidisse pestem, quæ non a Terrore adorta fuerit," a Doctrine which would lead us to a very unhappy Negligence, as the passions of the mind are not in our power - A Knowledge of the means of the Propagation of the Predisponent Causes of the Plague, composes the whole of our Prophylaxis -

I shall tell you in a few words what I think of the Theory of the Plague. It acts on the Nervous System as a Contagion, and (by the Intervention of that) on the mass of our fluids - In acting on the Nervous System, it is sometimes so Sedative

as to occasion sudden death - In most other Cases its sedative power goes so far, but it admits of some re-action, in Consequence of which a fever arises - It is but a Typhus attended with all the Symptoms of Debility, Delirium, cold Extremities, Anxiety, &c. It has a singular power of every where destroying the Muscular Tone. In the Sanguiferous System, the heart is much enlarged and the Arteries much relaxed - Very considerable abdominal Congestions are also frequently found; ~~and also~~ in the Lungs, and Brain; which affect the system of Internal Vessels - In Consequence of this an Effusion of Bile happens, which commonly produces violent Diarrhoea - The fluids appear considerably dissolved, the Exhalents take up the matter and deposit in the Lymphatic Glands; and some part of it is also deposited under the Skin - Very often this dissolution gives occasion to Effusions of Blood, Petechiæ, &c. - add, that Death is brought on by all the Symptoms of Debility, Gangrene, Sphacelus, &c - after the general Doctrine of fever before delivered, the Theory of every part of this is well enough understood.

I come next to the different Species of this disease - The difficulty of determining Species of Diseases in general, occurs here as much as any where - I am not clear concerning the different Species of the Plague; and I think they differ in degree only - There are

three

three Cases of it.

1. When the Plague is so violent, and its Sedative power so strong, as to bring on sudden Death without any Reaction, at least without giving time for a Deposition of the matter, so as to form Bubones and Carbuncles. This is the Pestis interna of Savauges, the first Species of the French Physicians.

2. When the power of the contagion is more moderate, and admits of a Reaction so as to form a fever, having time to act on the fluids so as to give occasion to a Deposition of matter, and to the formation of Bubones and Carbuncles - In this State, all the appearances mentioned yesterday may occur - This comprehends the 2.d 3.d & 4.th Species of the French Physicians, properly called by Savauges Pestis Vulgaris.

3. When the Contagion is still more mild, so as hardly to produce a Fever, and causes depositions of matter so as to form Buboes, &c. - This is the fifth Species of the French Physicians, the Pestis Benigna of Savauges. Chenau has made seven Species of the Plague, but he might as well make twenty, as they are only slight differences in degree - Even in the Cases I have marked, they must in some measure be mixt with each other. You may mark the two Extremes, but these are only rare Instances - The first Class will always be doubtful; but all varieties will occur more particularly in the second - The first may be considered as certainly, the last as certainly - The ambiguity remains in the Second.

Methodus Medendi. I do not think a Prognosis necessary here. Whoever understands the general Prognosis of Fevers, will here find the application easy - as for the State of Buboes and Carbuncles, I shall treat of it now; and think what is delivered in Writers in aphorisms on this subject, will be obvious to you, from our Consideration of fevers. As for the Cure, it is still involved in great disputes, arising from this, that Physicians want to form Absolute Rules where they are not even general - Our Remidies must be varied according to the varieties of the disease, and none must be either absolutely admitted or rejected. Our general Plan is the same as in Typhus, or Nervous fever, and Our Indications are,

1. To restore the determination to the Surface; and by restoring the Tone of the Extreme Vessels, to remove their Spasm. This is done by the use of Emetics, Sudorifics, and Neutrals.

2. To remove Abdominal Congestions, and obviate their effect in the Effusion of Bile. - By Moderate Laxatives.

3. To obviate by Tonics and Stimulants the Debility of the System, which here, as in other fevers, is the Chief Circumstance.

4. To obviate the Putrescency, by Acids, Neutrals, or Tonics.

5. A fifth Indication is (though not so much taken notice of)

of), perhaps, more directly to remove the Spasm of the ex-treme Vessels, by Blisters and Issues.

6. A sixth, more disputed still, is to remove the Inflamma-tory Spasm, by Bleeding.

7. Lastly, to Palliate Symptoms, by paying particular attention to the Buboes and Carbuncles.

The Plague is not so insuperable by Art as is commonly imagined; and we are no much better acquainted with Remedies for it, than the Practitioners in whose hands it has hitherto fallen.

The Atony of the Extreme Vessels is to be removed by Emetics. They are always important here to obviate the first Formation of Spasm; and we are obliged to Dr Lind for the first proposal of this Practice. In a general Epidemic it would be adviseable to put Emetics into every body's hands. But are they proper in the Plague when Spontaneous Vomiting? I think they are, as I have often found them in Fevers more powerfully to determine to the Surface than spontaneous vomiting. But when the hot fit is formed, and accompanied with Symptoms of great violence, Emetics would be very dangerous, as Dissections have often shewn in such Cases Effusions of blood in the internal Viscera, chiefly in the Stomach. When the Symptoms are more moderate, and tend more to the second Case, Emetics may be ansfed, either

either as such, or as Nauseating Medicines.

The second Remedy for the same Indication, are sudorifics, universally Employed in the Plague, but not without Objections and Criticisms - It is easy to perceive they may be dangerous. e.g. In Cases of Effusion of Blood - But we are not always immediately to conclude that Effusions are to take place, or even that there is a strong Tendency to them in the System - I imagine they have been objected to chiefly, because of the Nausea of their admi-nistration - Sweat was pushed on by warm aromatics; or if Opium was employed, it always was along with strong aromatics, as in Philonium, Mithridate, &c. - It is probable that Practitioners in the Plague have often erred in this respect - Chenau had so often found the bad effects of Sweat pushed on with heat, that he preferred to it a constant Diapnoe. But it is difficult to observe this, and to carry it to a due degree. From the Observations of Practitioners, I think tollerably full sweating is very useful, and especially now we are acquainted with the Pulvis Doveri, a perfectly safe Combination of Opium with Emetics and Neutrals. Old Practitioners had a practice called Interpolated Sweating, in which it was often repeated for a short time, and at short Intervals - But this I think in-feriour to a continued Sweating for a considerable length of time - It is Dr Sydenham made the Improve-ment I formerly ascribed to Dr Chalmers, to keep the

the Patient in Bed more than 24 hours - at the same time, if the Diapnoe of Chanac can be supported for a long time, it may be useful. Opi-ates and Aromatics with Diluents will not answer so well as our Saline Draughts or Neutrals -

Our second Indication is to remove Abdominal Congestions, by Laxatives. We see the necessity of this from Dissections, which have always shewn an Enlargement of the Viscera. Dr Thap of Metz proposed to Cure Petechial fevers entirely by Laxatives - and more particularly in the Late Plague of Marseilles, Purgatives were employed with advan-tage - Objections to them are more directed to strong Purgatives, as they are liable to withdraw the deter-mination to the Surface - But this does not apply to gentle Laxatives, given only to keep the belly open - and I think it is an useful Improvement proposed by Dr Chalmers of South Carolina, to combine Sweating with Purging; for Sweating alone is always in danger of pro-moting abdominal Effusions, which must be prevented by keeping the belly constantly open -

Our third Indication is, to obviate the Debility of the System, always, and particularly here fatal. All Practitioners have found it useful to employ Cordials in the Plague - Unhappily the An-

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Antients had none but Inflamatory ones; but we are acquainted with a much safer Tonic in the Bark. It has been proposed and given in the Plague; but in no sufficient quantity. You must remember that it is but of late that we come to give it in Continued fevers; and it has much less been given in the Plague. Cold Water is a doubtful practice - Stimuli may be useful, and if they are necessary, we are acquainted with one that has not hitherto been employed in the Plague, but which, from its use in nervous fevers, we would conclude highly serviceable here, Viz. Wine

Fourthly, To obviate Putrescency, by Acids and Neutralls. This has been long understood and practiced; and therefore I have nothing more to say upon it.

Fifthly, To obviate the Spasm of the Extreme Vessels by Blisters &c. We have no accounts of their being properly employed in the Plague. But if we trust to the accounts late Writers, as Dr Lind, give of their use in putrid petechial fevers, we would conclude them useful here also. Issues; - a singular practice has been employed in the Plague. An Incision was made on the thigh, or somewhere else, at a distance from the heart, and a piece of the root

root of black Hellebore was put into it; but it gave so much pain that it became necessary to tie the hands and feet of the patient - This practice has been rejected, for its severity, but it is said to have been of great use. I consider it as exciting an Issue, and if we consider the use of Issues against Buboes, we shall be prejudiced in their favour in the Plague - Dr Lind proposes Issues as a Prophylaxis against the disease.

Our sixth Indication is more doubtful, To obviate the Inflamatory Spasm, by Bleeding. The Cases of the Plague are very various - In some there is no reaction - In others there is a reaction with Inflamation, or Synocha, produced, in which Bleeding is advised by Sydenham and some others - But more frequently the fever is a Typhus - Most Practitioners have objected to Bleeding and I think it but little fitted to the powerful Sedative power of the disease. The Delicacy with which it is sometimes applicable to the Nervous fevers, must be more strongly applicable to the Plague.

I give you only the Improvements which I think might be made in the practice of the plague, and do not treat the disease fully - We have treated six Indi-cations of its Cure - I am to enter on the Seventh, viz. The Management of Buboes and Carbuncles - My

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Doctrine on them is singular indeed, but short, and not dangerous — It is, that the common Opinion of their being an Outlet for the Morbific matter, is not ad-missible; for, 1. they are not necessary, many persons recovering without their suppuration — And we know that the suppuration of the venereal Bubo is not neces-sary for discharging the morbific matter, which is often carried off by other outlets —

2. They are quite insufficient, because they are so few. Chenau observes that the most of the Patients he knew he had but three — Carbuncles rarely happen, and when present, they are almost as few. In the Small Pox, I shall the Pustles are not the only out-lets for the morbific matter, which applies much more strongly to the Plague — In this part of my Opinion I am not single — Chenau says expressly, "Quod est in Bubone, non est totum quod in Corpore "fuit miasma: reliqua pars per cutem transit."

3. We do not conceive how the whole matter of the plague can be collected in a single gland, as there does not appear to be any particular secretion. Therefore Bubones and Carbuncles are not critical, but symptoms only, mistaken for critical because they mark the Course of the disease — However, though they be not critical, nor evacuate any considerable

quan

quantity of morbific matter, yet the Inflamation and suppuration of a Bubo, like an Issue, may take off the general fever - Of what application this Doctrine is in Practice, I leave you to judge -

With regard to the Management of these, it is agreed that It should be the same as that of all topical Inflamations, tending to Suppuration - This is the case of Carbuncles only - But for Buboes, Chinca thinks they must be left to themselves, till they are filled with Pus, and then only opened. In this he differs from other Practitioners, particularly those at the Plague of Marseilles, who opened the Buboes as soon as they appeared, to promote Suppuration - It is enough for me to state to you the two Opinions - Future Experience, rather than Reasoning must determine this - But I say, that every superfluous Incision has a tendency to promote Gangrene, and if proposed to expel the morbific matter only, is quite useless - But on the other hand, if the application of a Caustic is found to determine the Inflamation and Suppuration better, so as to relieve the Patient, it must not be neglected - This is enough on the Cure of Plague -

I come now to its Prophylaxis - But this

this is so extensive a subject that I cannot treat it fully, and must be satisfied by directing your studies only — The Prophylaxis turns on three points.

1. On preventing the Importation of the Plague from that Corner of the world where it is Endemic.

2. On preventing its Spreading when already Imported.

3. On preventing the Infection in people exposed to the Plague.

The two first are Articles of Public Policy, but to be directed by the Physician — You may best learn what is to be done in that way, by the history of the Plague of Marseilles, particularly in the Traité de la Peste of Senac; from thence, and a few other Sources, Dr Mead has collected and given a plan more suited to the freedom of England. But Chenau, in my opinion, has improved on both — The principal Article for preventing the spreading of the Plague, depends on the confinement of Goods and Persons — But this is very difficult — Chenau observes that much of the rigour may be relaxed, as there is pretty sure means of knowing whether the person is affected or not, so that one might be stript of his cloaths, and be less rigorously confined himself.

The third Article, to prevent the Infection in people exposed to it, turns on two points,

1. On the knowledge of the nature of the Contagion. For this I refer you to writers, and among others to Dr Lind and Sir John Pringle.

2. On a knowledge of Occasional Causes - From I have delivered, with regard to fevers in general, I doubt not you will understand this - I say that all turns on these two points, and that the Doctrine is as vain as that of Charms - However, I do not mean to say there are no means of preventing the human body from being affected by the Contagion - Since many Persons escape it altogether, there must be a particu-lar state of the system fitted, as it were, to repel it. - On what does it depend? It is not quite Clear; but we may perceive the Vigour of the System has a great share in it - And it may be supported by Cold Bathing, Bark, Wine, &c. Cold Bathing has not been employed as a Prophylaxis against the Plague, but if you consider its invigorating power, I doubt not it will be thought useful. Wine. The Plague has been found to affect those chiefly, who have lived on water and Low Diet; - But I imagine there is more here than a better Diet, as People living on high diet, but without wine, have been found to be more affected by contagion than others - I think that Wine, like Opium, di-minishing the mobility of the System, is truely Tonic; and notwithstanding what I have said of

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Intemperance, there is no danger in the use of Wine, if carried to a due degree only. The Bark has been pro-posed and employed as a Prophylactic - But what is its true measure, is difficult to say - It is capable of producing its effects in an excessive way, and as it gives an Inflamatory Diathesis, it will indeed in some mea-sure preserve against Contagion; but if it does not do this entirely, the Consequence will be more direful.

Gen. XXVI. Variola.

Char. "Synocha contagiosa cum vomitu, et ex epi-"gastrio presso dolore. —— Tertio die incipit et quin-"-to finitur eruptio papularum phlegmonodea-"-rum, quæ spatio octo dierum in suppurationem et "in crustas demum abeunt, sæpe cicatrices depressas "sive foveolas in cute relinquentes."

This is an interesting subject, and of late a subject that has been much discussed, which is a proof that no very conclusive Arguments have been brought - I should begin regularly with the Character; but this is not difficult - Our Noso-logists have been very deficient in their Charac-ters of Exanthemata in general, and particular-ly in that of the Small Pox; and if you consult this, this will be obvious to you - I have put the period of Eruption on the third day - In this I differ

from

from Sydenham, who says that the Eruption ap-
-pears on the fourth day in the distinct kind, and on
the third in the Confluent. But I have had occasion
to observe 1000 Instances of small pox, in which the
Eruption has always constantly appeared on the third
day — But a mistake may arise here from the dis-
ease generally attacking at Noon; so if it begins
on Monday at Noon, the Eruption may appear on
Thursday forenoon, and be still properly in the third
day, or included between the 48. and 72. hours —

As for the history of the disease, I have
nothing to add to Sydenham — And on this sub-
-ject I am to confine myself, as I did on the preceding
one, to a few points, on which I hope to throw some light,
in order to explain the nature of this disease, and
with a view to ascertain the practice to be observed.

The Variolæ arise from Contagion; and
this is the most specific and certain contagion of any
that we know — On this, nothing presents itself more
readily, than that Contagion may be of different
degrees of Virulence, and of different kinds, to which
the differences of the disease might be ascribed — I will
not entirely deny this, but allow that it may have a
share; but I deny that it is not a small one, and ima-
-gine that the chief difference depends on other Cir-
-cumstances. The Doctrine of different Contagions
leads

leads to give anxiety and a very dangerous negligence. We have now experienced every day, that with the same parcel of matter we inoculate perhaps twelve persons at once, in all of whom the disease shall sometimes turn out different; and it is not in Inoculation only that we see this. The Small Pox is sometimes introduced into a family, and from the day of the suppuration taking place in the first Child that is attacked by it, another takes it, and therefore it is from the first that he gets it; yet in that way the distinct Small pox often gives rise to the Confluent, and Vice Versa - The best Practitioners now take no notice of the Origin of the Small Pox. Perhaps they go to excess in this; but very commonly this is of no consequence.

Variolæ are either distinct or Confluent, and in that View they are distinguished from each other -

1. By the Pustles.
2. By the Course of the Fever.
3. By the state of the suppuration or effusion better formed in the distinct.
4. By the number of the Pustles being much greater in the Confluent -

I have a mind to try, whether by considering this single Circumstance of the number of the Pustles, and the Causes determining it, may not account for all other differences - To do this, I say that, as in the Plague, most part of the morbific matter passes by Perspiration, the same may be supposed to happen in the

the small pox; and the quantity of the morbid matter passing that way will determine the number of the Pustles

When a ferment is introduced into fermentable matter, on due time being allowed it multiplies and extends itself through the whole of that matter - With regard to the small pox, there is always due space and time allowed, and we do not perceive much difference in this respect, even between the Confluent and distinct, which arise much about the same time after Infection - Therefore we suppose that the quantity of matter is pretty much the same every where, and if but few Pustles often appear, the rest of the matter must have passed by Perspiration - When it is stopt by the skin it forms the pustles - We can perceive that these are determined by circumstances of the Skin, which stop the matter - In proof of this we observe, that heat is a powerful means of determining the Pustles to arise in some parts - Children are liable to sleep more on one side than on the other, and the Pustles are observed to be more numerous on the side on which they lie - A young man affected with the small pox, laid himself before the fire: the side towards the fire was very much affected with Pustles, but the other scarcely at all - A Blacksmith had the small pox, and his bed lay against a wall, on the opposite side of which was his forge: that side next the wall was much more covered with Pustles than the other. Perhaps by this Circumstance of heat alone, we might explain the frequency of the Con

Confluent kind during the period the warming Regimen was so much employed - The same may be said of Mili-ary Eruptions - I have seen an Example of this; a man affected with Rheumatism, and who was under an Artificial Sweating for it, was covered with such an Eruption of the small pox in the places only that were under the flannel - If during the Eruption of the Small Pox a Plaister is applied to some part, many more pustles arise on that part than any where else - This was a common trick of the Suttonians, who boasted they could bring the Eruption where and in what manner they pleased - and by this is explained the great number of Pustles arising in the part of Inoculation, as that part is generally covered with a Sticking Plaister - There can scarce be any doubt, then, that the number of Pustles depends on Circumstances not entirely owing to a difference of Contagion, but that heat, for Ex-ample, has some share in it -

2. The effect of the Diathesis Phlogistica in the sys-tem, has a great share here - Dr Wintringham observes, that at the season of the Diathesis Phlo-gistica and of Inflamatory diseases in general, the small pox was in proportion to the prevalence of that season more or less Confluent.

3. External Causes give manifestly a more Conflu-ent small pox, such as Heat, Intemperance, &c. and we know the same Occasional Causes give ac-

-tivity

activity and force to other Contagions, that is to say, do not change the Contagion, but encrease its effects; and in the small pox, determine it to the Confluent kind - From hence we may conclude that a number of Circumstances determine the activity of Contagion in Small pox, and particularly the number of the Pustles - And I think you will find that the number of the Pustles is produced by the matter being hurried to the Skin faster than Perspiration; and being stopt there by the Circumstances of the Skin, chiefly by a more considerable spasm of the Extreme Vessels & Hence the greater fever:- And hence depends also the different state of the Pustles, and of the Suppuration, as you may easily perceive -

Now to proceed to the application of this to Practice: This consists now of two parts,

1. The measures of rendering the disease more mild, to be taken before it ~~occurs~~.
2. The management of it when already begun.

With regard to the first, all that can be said in this way is comprehended under the article of Inoculation, the benefit and utility of which is establish'd on a very sure foundation - When in Scotland we had not in the Course of thirty years Inoculated a Thousand persons, I would not conclude much from hence in favour of that Practice - But within these ten years

years. 20,000 persons and more have been inoculated in England, with such an immense advantage, I think we have reason to be for Inoculation in despite of the Cabals of those who oppose it - The Advantages arising from that practice, or at least spoken of, are

1. The choice of matter - In supposing that much depends on the difference of Contagion, it would appear, that the matter taken from a mild small pox would be preferable to that from a Confluent; and in allowing that other Circumstances, as we just now said, have a great share in determining the small pox, yet it is not possible for us to assert that probably this has no share at all in the disease - I observed that the Effluvia of the human body when immediately arising from it in a state of health, are very innocent: nay they have been alledged to contribute to health, chiefly those of young people - This enough to say they are at least innocent - But if accumulated, confined, as well as mixt with other matters, they may become a virulent poison, as we saw when treating of the Nervous fever - From hence I presume, that it is probable that human Effluvia, though innocent by themselves, acquire a greater force by adhering to some other bodies - In proof of this, we see that most Epidemics arise from a Fomes, and are accordingly more violent at first than afterwards, because they first arise from a fomes, and then from a human body itself - We have a proof of this in the Plague of Marseilles

Marseilles - The disease was at first extremely virulent, so as often to strike down suddenly the people who opened the bales of Goods from the Levant; but when these were re-moved the disease became much milder, so that at last it was remarkably moderate. In the Jail fever of the Old Bailey of 1755 most of the persons who caught it of the prisoners in the Court died, so that of forty, not above two or three recovered - But there was no instance of these having spread the disease any farther; yet there is no doubt they were as well served and nursed as possible - But as they were persons of Note, and probably very clean, there was no fomes, and therefore the disease did not spread - This applies to the small pox. In Inoculation we take the matter from the person himself affected; but in the natural way we take it from Fomes; and therefore the Inoculation must be safer on this very account - Upon this subject you will perhaps expect that I shall speak of the present Practice of taking the matter as soon as there is any effusion; whereas for-merly they waited till the Pustles were very ripe - As far as I can judge of it, it is probable that the new practice is the best - yet we do not see that the Confluent small pox is less frequently brought on in this way than in any other; and in the East Indies they keep the matter for a very long time, a year or more, without any bad Consequences - But it

It may be said, that they keep it dry, and therefore it is in-capable of acquiring Virulence.

2. The small quantity introduced - But this appears to me of no Importance. I presume that in the natural small pox, the quantity taken in is very small and inconside-rable, considering from what slight occasions the Conta-gion often arises: and on the other hand, we have many Instances of Inoculation with a considerable quantity of matter, without much more effect - I knew a Practi-tioner who has Inoculated a great number, who used to employ a great quantity of matter and make many Inci-sions at once, without having more Deaths or Conflu-ent pox than others - In the Chinese practice of putting the Pustle in the Nostril, I imagine a greater quantity of matter is taken in, but with no worse Con-sequence - Besides, from a Theoretical view of this I ima-gine, that from the Doctrine of Ferments, a small quantity will spread itself as much as a greater one.

3. The choice of our Patients, either with respect to their age or health in general - With regard to age, an Opinion has prevailed, that Infants are disposed to have the disease milder than others - This appears probable both from Reasoning and from facts - From Reasoning; for Children have less Phlogis-tic Diathesis than adults - From Facts; for certain-ly Adults are more subject than Children to the

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Confluent; and though late Experience has shew that Ino-culation is as safe in Adults as Children, I would conclude that the practice on Children is preferable. But we have gone to Extremes; in England it was some time ago the practice to Inoculate Children at the breast, with this view, to put them sooner out of the reach of Contagion - But this is attended with diffi-culties, because, though the Phlogistic Diathesis is less in them, the sensibility and Irritability of their systems are much greater - Small pox is liable to occasion convulsions in Infants, which though, as Sydenham says, are often a good Symptom ushering in the Eruption, they are however in inoculated Children the Cause, or at least a Concurrent symptom, of Death: Therefore I would wait till the Teething is over - Besides, our Infants are kept in too great heat for the small pox, which I am confident has often proved noxious; and whenever I am called to Children seized with the small pox, I constantly take Care to have them out of their Cradles as much as possible - another consideration is, that when Children have the small pox, they have often pustles in the nose, which form a crust, and stops the nostrils, so as to starve them, as I have seen, for want of sucking, if they have not been before taught to drink out of a spoon; which indeed should be done soon - Upon the whole, then, younger years are

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preferable for Inoculation - But it should not be per-
formed on Children at the breast - With regard to
the state of the health; - as the Contagion may seize
along with other diseases, it is certainly an advantage
in Inoculation to be able to avoid this - When a con-
-siderable disease is formed and evidently subsisting,
there is no doubt that there are Cases of Valetudinari-
-an people, or such in whom some disease is suspected, where it
may be questioned whether Inoculation is allowable - This ques-
tion often occurs in Practice, and neither reasoning nor Expe-
-rience has as yet determined the Cases in which Inoculation
may be hazarded - This must be left to the discretion of the
Physician; yet I will venture a general Rule upon it -
In the time of general Contagion, where there is danger of
taking it, Inoculation is allowable in doubtful Cases.
Lately, in 1768. in the West of Scotland, at Greenock and
Port Glasgow, the small pox was very prevalent and fa-
-tal, hardly one of ten escaped - It was proposed to Inoculate
Children, which was accordingly done with so much suc-
-cess that hardly one died of 200 - This is a very striking
fact in favour of Inoculation in general Contagion -
But the same question may frequently arise concerning
different states of the habit, e. g. in Children suspected of
Scrophula! I think in natural Small Pox Scrophulous
habits as often escape as others; and therefore that it is
not a sufficient reason for neglecting to Inoculate
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a Child, that he is suspected to have the Scrophula, or that he is of a scrophulous Family - Nay I have - I have known Children with Scrophulous sores, perhaps, on every part of the, escape as lightly as others; and even the Scrophulous sores to disappear entirely for three months, though they returned; and one of these Patients is now Scrophulous, but with hopes of a Cure -

4. A fourth Advantage is the choice of seasons - On this I have fluctuated in my Opinion - attending to an observation of Dr Wintringham, already mentioned, viz. that the Inflamatory diathesis encreases the Malignity of the Small Pox, and that it was in proportion to the Season of Inflamatory diseases, I have no doubt to consider winter an improper season for Inoculation - But on the other hand, I thought the Putrescent tendency of the small pox might be too much encreased by the heat of summer - I had occasion in an Epidemical Small pox at Glasgow, which lasted more than a year, to observe that the number of Deaths was greater from March to September, and chiefly in July - The Summer was very warm From this I declared against winter or summer, in favour of Spring or autumn - But I now suspect I was mistaken. Inoculators prefer the summer, and their success pleads for them - Besides, from Reasoning, as the Small pox is an Inflamatory disease, depending much on a Phlogistic Diathesis, which is diminished in the summer Solstice, and encreased

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in the winter solstice – Therefore I would imagine, that though the Summer season may aggrevate the Confluent small pox, it is less fit to bring it on – Besides, it is the fittest season for Exposure to the cold air, so useful in this disease – Therefore it is an advantage of Inoculation to choose four months, between the cold of Spring and Autumn, in avoiding the Dog-days, generally more dry and hotter than the rest –

5. Avoiding the Concurrence of Occasional Causes, which give activity and force to Contagions. Whoever knows the violent effects of Fear, from the history of the Plague, and at the same time to what a degree the Fear of catching the small pox avails in England, must certainly believe it to have a great share in aggrevating this disease, and would never Expose adults to it – Again, whoever knows the effect of Intemperance in aggrevating Contagions in general, will certainly prefer Inoculation. The effects of Venery are not so particularly ascertained, but from the Analogy of its effects in other Contagions, we suppose it has a great share here – and it is certainly an advantage of Inoculation to be able to avoid all these external Causes.

6. The Preparation of the body – Somewhat is to be imputed to this, but not so much as Physicians, for their own interest, commonly suppose – I have mentioned the Circumstances prompting the small pox, and among others,

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peculiarity of Temperament, which appears to be one from Children being differently affected with the same matter - In what does this Temperament consist? Or how is it to be avoided? These are not well ascertained - But we may perceive that the Diathesis Phlogistica has a great share in it: and this is diminished by abstinence from Animal food - It is with propriety, then, that in Scot-land some people make their Children abstain entirely from animal food till they have had the small Pox; and that Inoculators order such Abstinence some time before the Operation - In the East Indies, those who through Religion abstain from animal food, take care before Inoculation to abstain also from Milk and Oil, the most Inflamable parts of their diet - I would also allow Purging, not so much for changing the Tem-perament as for Cleansing the Primæ Viæ, and as being a part of the antiphlogistic Regimen - The Use of Mercury is dangerous, as inducing a formal Phlogistic Diathesis. This subject of preparation for the small pox is mentioned in the Medical Essays, and a List is there given of Mer-curial Preparations, and Purgatives of all kinds, which were all tried; but the effect was no better than when they were omitted - Nay I have been told by some practitio-ners of that time, that they were rather hurtful. With Regard to Antimony; it is useful in fevers as deter-mining to the surface, and resolving spasm - But when it is given by way of Preparation in a small

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quantity used for a few days only, it cannot be supposed to have great Effects - I conclude, then, that the Dietetic preparations may be allowable and proper, but that the Parmaceutic are at least doubtful, if not dangerous.

7. To the Advantages of Inoculation I must add, that much has been said to depend on the management of the Practice.

α. Secret preparatory Medicines - But from what has been said you will probably not have much faith in them - Dr Dimsdale, without pretending to any secret, has had as much success as the Suttonians, who did pretend to it.

β. Keeping the Body cool, By Laxatives and Acids - This is proper in the Disease, but is not of much advantage as a preparation.

γ. Chiefly Cool Regimen - This is the principal part. There is nothing more important in this disease than to avoid heat and to compensate the too great generation of it by cool Air. The advantages of this are established upon general Experience - But is the Rule so universal as is commonly said? I think it has some Exceptions.

1. In case of very numerous Pustles, whether distinct or Confluent, it very often happens that the Patient cannot stir out of his bed for uneasiness. Is cold air to be admitted in this Case? I have no doubt but the transitory application of cold air may be useful, but I would imagine that a constant stream of cold air is to be avoided.

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2. In the new method, they give cold water for drink. But in the Case of numerous pustles, with much Angina and Salivation, is cold Drink admissible? I do not know what would happen in Consequence of Cold drink in the beginning of the disease, but in such Cases, I have often seen bad effects from accidental cold drink; and on the Contrary, much relief from bland tepid Liquors. What has happened to other Inoculators I do not know, but Probably, as Practitioners, they conceal their bad Success. From all this it follows, that from so many sources of advantage, Inoculation is much to be preferred to the natural small pox.

I am now to consider the conduct of this disease, from ever source it may arise. It is to be hoped that Inoculation will soon be so universally practiced, as not to give rise to frequent Niceties of Management. But as this is not the Case, and as Inoculation often gives difficult Cases, the subject is worth our attention. I am not to enter into a full detail of the method of cure, as you may find it in Sydenham; but am to speak of disputed Remidies.

1. During the Eruptive fever, it has been questioned how far <u>Bleeding</u> is proper. Sydenham orders it absolutely in every case. But from the Benignity that is to be presumed the Small pox will have from Inoculation, it is scarce practiced at all in such Cases.

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and even is commonly neglected in those of natural Conta-gion, from fear of retarding the Eruption - But all such fears are ill founded - Much Experience has taught that where the Eruption is prevented by debility and want of fever, it is fifty times, on the Contrary, pre-vented and made worse by the excess of Fever; and truly the Eruption happens on some remission of the fever, and therefore may be rendered easy by di-minishing the Impetus of the Blood by Bleeding - We had an Instance of it sometime ago in the Infirmary. a Boy had some Complaints which at first were not known to be the small pox - He was bled in the very moment of the Eruption, and was much the better for it - On one hand our fears, then, being groundless, and on the other the Phlogistic Diathesis prevailing, I imagine Bloodletting a very good Remedy - Whe-ther there are any Exceptions to this, I cannot so eas-ily say - When the fever is a Typhus, when the Pa-tient is weak, his face pale, when there are other Symptoms of Debility, and when the nature of the Epidemic is to prove confluent or putrid, I would hesitate about bleeding - But such Cases are very rare: - and even then, whatever augments the Dia-thesis Phlogistica, augments also the Putridity.

2. During the Eruptive fever, Opening the belly has been avoided from the account; but these fears

fears are merely theoretical and ill founded - The Ino-culators constantly and freely open the belly; and I imagine it is proper - In the Small pox there is a determination to the stomach and abdominal Viscera; the effects of which are prevented by Purging - In short it is long since I learned that Practise from Dr Wintringham and others, and have constantly employed it with good effects, giving frequent Laxatives, and even Purgatives and Glysters.

3. Vomits are given, - perhaps to cleanse the stomach. But a more Important use of them is to relieve the determination to the stomach, which is marked in the Synopsis thus, " ex epigastrio presso dolore!" - Vomits are very useful to solve the spasm, so as to allow the morbific matter to take its Course with the Perspiration, without inducing Pustles - There has been some hesitation about the time of Exhibiting Vomits - From the same Fears every Medicine is generally avoided at the time of Crisis - But Experience teaches us that this is without foundation.

We are now arrived at the time of Eruption, often attended (chiefly in Infants) with Convulsions, a good Omen if they be few and gentle; but often they are constant, violent, and then dangerous - Bleeding and Blistering are the Remedies employed against them; But the first is precarious, and the last

last often comes too late. I have been informed by a good Practitioner, that he has had good success from Opiates. In Infants attacked with that symptom, a dose or two of Laudanum dissipates it. I have often had occasion to see the use of this Remedy. Sydenham, the great Patron of Opiates, is doubtfull, however, about them for Infants. But he allows them in some cases; and I am persuaded they are a good Remedy. If the Pus-tles are few, they require no particular management. but if numerous, even in the distinct small pox, they require a cool Regimen, Purging, and Opiates. The pro-priety of using them, has been disputed, and you may see the objections against them strongly urged in a Paper in the Medical Essays by Dr Symson. It is al-ledged that they encrease Costiveness, fever, Delirium, &c. But if these Symptoms are Symptoms of Costiveness, they will be prevented by opening the Belly. But do Opiates encrease fever? I would suppose they may in some Cases of Inflamatory fever: But when it has had its effect, they will promote the suppuration; and I should presume them generally safe after the sixth day of the disease, when the Effusion has taken place. But besides topical Inflamations, they prevent the effects of the general Acrimony prevailing in the System, chiefly affecting the Fauces. As Cordials and Tonics they may also be very useful. Of late we have learned that the free use of Wine is serviceable in some Cases of small pox. We have had several Instances of Wine in

in greater or less quantity diminishing the Fever and Delirium, and I think we have reason to conclude that Opiates operate very much like wine - 'Tis with some such view that Sydenham Orders them so much, and the more, as the Delirium and the Irritation of the Sensorium appear greater - As I suppose his book is in all your hands, it is unnecessary to repeat his Words - You may consult his Processus Integri and other parts of his work - If the Delirium encreases he gives Opiates in small and frequent doses, till the symptoms are relieved - From this you may conclude that Opiates are universally useful.

Another Remedy, with which Sydenham was not acquainted, is **Emetics**. About the beginning of this Century, Dr ——— of Berlin, introduced this Practice, giving often Vitriol, but more commonly Tartar Emetic. However, the Practice was not followed, and it was James' Powder which gave rise to the use of Tartar Emetic in the small pox - At the fourth Tertian period, the effusion in the pustles is more marked, attended, on the eighth day, with swelling of the Face - But often the Pustles are not well suppurated, and then the fever rises, and Angina and Delirium occur. In such Cases I have frequently seen Tartar Emetic aleviate and dissipate all these Symptoms - There fore I conclude the alternation of Tartar Emetic with Opium, a very good Remedy -

Bark

Bark is commonly considered as promoting the critical suppuration; but this is not correct, as the suppuration is not critical, but merely symptomatic. When the fever and Inflamation are high, the Bark may be hurtful; and I have seen it very much so — But the Bark is to be considered as a Tonic, with a view to correct the Putrescency and Debility. But here, as every where else, it is of little use, unless given in substance and by large Doses — It is very difficult to make Children and sometimes adults also, swallow it; but I am convinced it is universally proper, chiefly in the Confluent small pox.

The Secondary fever is the most common Case of the fatality of the small pox, and therefore giving Practitioners the greatest trouble — It is of two kinds.

1. When after distinct Small Pox; and then it is generally an Inflamatory fever, and to be treated by bloodletting. But when it is after the Confluent kind, bleeding is improper — The Bark, moderate Purging, and Opiates, are sufficient — Sixty years ago Dr Mead and Others took much pains to prove that Purgatives were a very useful Remedy in Small pox, and, considering the Abdominal Congestions so frequent in the Confluent kind, I would agree with them: But the Evacuation must not be too great. The opening

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the belly even with some Evacuation, will certainly be very useful — As the Putrid fever is here the chief thing to be attended to, I depend much on the bark — As for Opiates, I think they, as a Tonic and Cordial, are useful here, especially since during the beginning of the Disease the System has been accustomed to them; and therefore, though they are contraindicated by the Abdominal Congestions, they are not to be omitted all at once.

We come now to Rubeola. In the Synopsis I have put before it Varicella, introduced only with a view to distinguish a pretended Case of Second Small Pox. It is called the Chicken Pox: And from the Character given of it, the slight Symptoms of fever, and the Pustles leaving no Cicatrices, it is easily distinguished, and requires no more particular distinction. Therefore we proceed to

Gen. XXVIIII. Rubeola.

Char. "Synocha contagiosa cum sternutatione, "epiphora, et tussi sicca rauca." —— Quarto die vel "paulo serius erumpunt papulæ exiguæ confertæ, "vix eminentes, et post tres dies in squamulas furfu-"-raceas minimas abeuntes."

The Characters given of it are sufficiently intelligible, perfectly well distinguished from any genus or Species of Exanthemata & The Scarlatina is the only one

one that can give any difficulty - But this is by no means so frequently attended with Catarrh as the Meazles; and after the Eruption, the Diagnosis is easy - With regard to the Meazles, I refer you to Sydenham for the history, and confine myself to some remarks on the Pathology. We know nothing of the nature of the Contagion, and our Practice turns entirely on its effects, without attending to this Cause.

You might suppose the Epidemic of this Winter afforded me some new Observations; but though there were some varieties, the disease was surprizingly uni-form. Often the Catarrh begun before the usual time, often it occurred in different degrees, and often it was obscure. The fever also varied in degree and du-ration; and so did the Eruption and its appearance on the skin - But at bottom the disease was the same, and differed only in degree - The only singularity I have heard of in this, though I did not see it myself, was, that after having disappeared, it returned some-times after two or three weeks with as much vi-olence as before - I see the same thing marked in Authors; and from such facts it is probable that it was said this disease could twice attack the same person, and even in the same season; which is stronger than at longer Intervals - I think this must be

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considered thus: That the matter requires a certain time to go off by Desquamation, but if retarded by any circumstances, it may lie latent in the System, and reappear afterwards by Eruption when under the Influence of some exciting Cause -

As for the Pathology of this disease, we must observe, that we know Contagions only by their effects, on which our practice entirely turns, without any regard to their Causes. Here they are chiefly two.

1. A Catarrh, which I think absolutely inseparable from the disease.

2. A general Diathesis Phlogistica, affecting the whole system.

As for the Catarrh, it may possibly be refered to an affinity between the Exanthematic matter and that of Perspiration - As the Exanthemata are known to be much, chiefly by passing with Perspiration, we very readily suppose such an affinity; and at the same time we know by certain Experiments, that the matter of the mucous glands has an affinity with the materia perspirabilis, so that the Perspiration being obstructed, the secretion of the mucous glands is encreased and brings on Catarrh, which may be thus occasioned by the morbific matter having an affinity with that of the mucous glands - But I am not now so much persuaded of this as formerly - I suspect

rather

rather a Catarrhal matter specifically determined to the mucous glands, and chiefly, perhaps, to those of the Trachea and Bronchiæ - yet I imagine that it is a Law of the system, that whenever the perspiration is obstructed, it is more determined to the mucous glands of the Trachea and of the Bronchiæ -

The Catarrh is at first generally dry, attended with much hoarseness; but frequently it becomes humid, attended with Expectoration, - a salutary appearance in the beginning of the disease -

The Diathesis Phlogistica very generally affects the system - It may be supposed that it is an attendant on the Catarrh; but it is highly probable that it may be considered as a Symptoma Causæ - The morbific matter very likely attacks particularly the Trachea and Fauces; but it also attacks the whole system - The whole danger of the meazles arises from the Topical Inflamations induced by this, and chiefly affecting the Lungs, because of the concurrence of the Catarrh: - another leading Fact - It is rare for the fever of Meazles to subside, as in other Exanthemata, when the Eruption begins - It much more commonly continues, and even encreases, even when the Eruption has finished its Course; and often a new determination arises, which keeps up the fever - Further, the diathesis Phlogistica is liable to continue long, so as to be determined to different parts of the System - It is on this

that

that the Dregs of the Meazles, as they are called, depend - Whether this depend on a morbific matter remain-ing, or on something else, is not necessary to determine; for from that supposition we get no Indication.

Cure. Though Catarrhal Symptoms may be relieved by Mucilages, Emollients, oily remedies, and Blisters, yet the total cure depends only on preventing the Effects of the Diathesis Phlogistica, by the Antiphlogistic Regimen, Bleed-ing specially, and Purging.

Bleeding. The Imputation of a subsequent Eruption is no objection - I spoke of this in the small pox, but particularly here the Eruption will always be more moderate and easy under a less diathesis Phlogistica; and therefore bleeding will favour its appearance - From the first attack to the end, in proportion to the fever and Dyspnoea, Bleeding is always proper - But I have always thought that it is better to re-serve it for the time of the Eruption - It is at the end of the Eruption that the danger of the Diathesis Phlogistica is most to be apprehended; for it is then that it is chiefly de-termined to a very Important Organ. I have se imme-diately before the Eruption much Dyspnoea and Anx-iety, which would indicate bleeding; but upon the Erupti-on they have disappeared - again, when the Eruption disappears, I have often observed much Dyspnoea and Anx-iety, which subsided then, the next day, or the day following. If we could know that this would be the case, Bleed-ing would be unnecessary - But as it is at least safe at

that

that time, and as it is chiefly (if the Dyspnoea and Anxiety remain) necessary in great quantity, it will appear that during the Course of the disease Bleeding is our chief Remedy - As the Dregs of the disease consist in the Diathesis Phlogistica in the Lungs, it may be proper to remove them by Laxatives, but not on the supposition of their evacuating the morbific matter. I have now given you the general plan of the management of the Measles, considered in itself - With regard to its different Terminations, they have been or will be treated off in their proper places - Two or three questions remain.

1. From the late Practice introduced in the small pox, of exposing during the Eruption to Cool and even cold Air, ~~is it admissible~~ here? Future Experience must determine this question, which our present Experience does not enable us to say any thing of - I have indeed seen people accidentally Exposing themselves to cold air without bad Effects - But this is not enough; and from Catarrhal affections certainly being made worse by cold, I would rather avoid it - But at the same time, hot air, and any thing keeping too much heat, is as noxious here as in the small pox.

2. How far are Opiates admissible? I have touched this on the subject of Peripneumony - I said, that when there is a particular irritation, Opiates may often be more useful by taking it off, than hurtful by increasing

increasing (as they are liable to do) the Inflamation. But this is still much stronger in Cases of a general Irritation, as here - From this, and upon the autho-rity of Sydenham, I have always employed Opiates in the Measles, and with Success.

3. Is Inoculation to be attempted here as in small Pox?.
I have no hesitation to say that the Scheme was very com-mendable in our Colleague, Dr Home - But the success has not answered the Expectation, as in the few Cases which seemed to favour it, it was doubtful whether the Eruption came from the Inoculation or from natural Contagion.

Gen. XXIX. Miliaria.

Char. "Synochus cum anxietate, frequenti suspirio, "sudore olido, et punctionibus Cutis. — Incerto "morbi die erumpunt papulæ rubræ, exiguæ, discretæ, "per totam cutem praeter faciem, crebræ, quarum apices, "post unum vel alterum diem pustulas minimas albas "brevi manentes ostendunt."

I have already said much upon this disease, and should still have much to say; but upon further consideration of the subject, I think it is improper to treat it fully, as it would be little more than a tedious Criti-cism upon authors, probably unknown to you - Ano-ther reason is, that I cannot judge of the facts of other persons, which have not fallen under my own Experience.

And

And therefore must be satisfied to give the result of my judgement and reading on this subject.

1. It is, I say, at least frequently Symptomatic. I have reasons for avoiding speaking of its Character till this is explained.

a. I have seen people that never sweat for some time, without such an Eruption.

b. It attends many Diseases, as the Plague - It is surprizing that Diemerbroek gives an account of this Eruption in the Plague, when he says that it appeared the first time at Leipsic; and will not allow that it is ever Symptomatic. It attends the Jail fever, and often also the Nervous fever, or Typhus, when it is attended with Petechiæ - It attends the Epidemic Catarrhal fever, the Rheumatism, Pleuritis, and Intermittents, all diseases attended with profuse sweat - But it is no where more frequent than in the fever of Child-bed Women. Now, while I have thus marked it attending so many diseases as a symptom, you see there is nothing constant here - Many of these are not Epidemic, but Sporadic, as Pleuritis, Rheumatism, &c. In all these Cases it never appears without sweating, and even in those parts only that are more tightly wraped up, as I have had occasion to observe in Rheumatism - Dr Fordyce observes, in many Cases it happens only where the Linnen is more tight, as in the neck; and I have seen it under the Wrist-bands - Observe further, that the

the Eruption keeps no stated period - I can produce a thousand instances in Authors of an extreme variety here, from the second to the fourteenth day - It is as undetermined in its duration: sometimes it lasts two days only, and sometimes seven or eight - It is not, as other Exanthemata, finished by one Eruption only, but will, in the course of one disease, appear and disappear several times - I have seen it five or six times successively - It will attack the same person many different times in Life - I would not say that these last facts are sufficient to determine that it is not an Exanthematic Contagion; but at least they have much Influence in throwing doubts on this - I think in the Cases marked there is reason to suppose, that it did not depend on a particular morbific matter -

But on the other hand, they say, that it occurred of late only, and first at Leipsic in the year 1650 - That it has spread over Europe and appeared in places where it never had before - Further, it is true, say they, that it is accompanied with sweat, but this sweat is of a particular smell, which was sufficient for Dr Fordyce to distinguish it - There is a peculiar internal anxiety, attended with frequent sighing; and a particular feeling in the Skin, as of a matter repelled, resembling what we call the Cramp, or a particular stupor - Tremor and swelling of the Extremities of the ends of the fingers, more commonly with a feeling over the whole surface of the body, like the

the pricking of Needles - Farther it attacks one Family all at once. Dr Fordyce has often had his hand affected by the contact of his patients hands - All these facts are puzzling when compared with the former

But its appearing first at Leipsic in the middle of Last Century seems to be alledged upon a very slender foundation - Think it clearly appears from the Works of Fernelius, Forrestus, Riverius, &c that they had observed it; and without much straining the matter, even Hippocrates himself, and other Antients. It is a poor Argument to say that had Physicians known it before, they would have described it before; for I maintain that before Sydenham there was no tolerable description of any disease - Before him no attempt had been made to establish a Historia or Character of any disease - If Aretaeus, Caelius Aurelianus, or Celsus have any tolerable Character of a disease, we extol their Sagacity to the Skies - But I say, if their diseases were any way similar to ours, those Authors are more to be blamed for their Omissions, than praised for what they have given us - How few Pringles and Senacs are there in Europe now? But how much fewer have been before? Besides there are no diseases of which we have so imperfect accounts as of Cutaneous Eruptions; and with regard to this in particular, if it is so often symptomatic, it is no wonder that it was not looked upon as material and wor-

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worthy of notice - As to tracing the Contagion from Place to place, there is here the same fallacy - How many towns have got Physicians lately that had none before, or none sufficiently learned?! Allioni of Turin, who is the Chief Writer on this, has little weight with me, as he constantly confounds the Idiopathic and Symptomatic milliaria, and even does not allow it ever to be Symptomatic. The Fœtor of the sweat and Pricking felt on the skin, may be as well accounted for, whether the Eruption be Symptomatic or Idiopathic - Therefore, though I would not say that this disease is never Idiopathic, yet in most Cases I am apt to consider it as Symptomatic. In the Case of Contagion in one family, it might be no more than a contagion determining to such Sweatings as are always accompanied with such Eruptions, and not to be referred to a Contagion certainly and uniformly determining to that Eruption -

As for the Character, I have given it you as it appears in most Cases, even when considered a Idiopathic; and I think it tolerable exact, and applicable to no other Eruption - But you must not expect to find the Authors on this subject uniform and consistent with themselves. They have distinguished the Purpura Alba et Rubra. I have spoken only of the Alba, so that you must take only a part of the Synonime of Hoffman that is adjoined - As for the Purpura Rubra, it is extremely various and different. The English have indeed a

a generic name for it, Viz, the Rash; but there are many varieties of this, and it is difficult to give them a general Character. Almost the same difficulty occurs in Characterizing the Purpura alba - In many Pustles like millet seeds, there is an Apex, better felt than seen - among these Apices, some form a little bag, full with pure serum; others are full of a matter that changes into perfect pus - all the varieties of the Purpura rubra and alba, I have observed accompanied with the symptoms supposed to be peculiar to the Purpura alba, as Anxiety, Sighing, Sudor olidus, Pricking, &c. From this I am apt to suppose they are only varieties of the same disease - Petechiæ have often been confounded with miliary Eruptions, as you may see in the Physicians of Vienna - But I cannot admit all their Facts, as they are engaged in Controversies with each other, and are therefore to be supposed to strain Facts to their own Opinions.

As for the Cure, let those who consider the disease as Idiopathic, give an Idiopathic Cure of it - I cannot do it, as I have never met with it but when symptomatic - But as such, it may at least constitute Species of a disease, and change the method of Cure - On this subject consult the Venerable De Fischer, de miliaria Eruptione, a book you are perhaps too little acquainted with. He is the Archiater of the Czarina, and after a Court life, at the age of Eighty, studies Physic with as much Alacrity as ever. His Indications are,

1. Spasmum febrilem sopire.

2.

2. Vires Vitæ fulcire.
3. Excretionis peripheriæ habere rationem quamvis non primariam.

I imagine his good sense chiefly appears in this last Indication; and I think, with him, that even though symptomatic, that Eruption is not to be neglected – He blames the application of cold water, commonly employed. Child-bed Women, who are most subject to this Eruption, are so very much debilitated even from the mere loss of the bulk of the Child, that they cannot admit of the Sedative and astringent Effects of cold Water, or even of Cold air – But he agrees also that it is very pernicious to admit too much heat – Sir David Hamilton, a man Midwife, who has professed to be a Writer on miliary Eruptions, very much recommended the warm Regimen – But he shews so little Discernment or Judgement, that I imagine he has sent as many mothers that way out of the world, as he has brought Children into it by his Profession – De Fischer judiciously observes, that warmth augments the Eruption, which is to be avoided as in small Pox. Therefore heat, except so far as to avoid the application of cold, may be prejudicial – No attention is to be given to the Eruption, the Fever being the only thing to be regarded. Authors have long Lists of the Remedies that have been proposed here: many of which are so innocent that they can do neither good nor harm; and it is prudent to have a good stock of such Formulæ – But as for the Leading

The

Remidies, Bark. Bleeding, &c. there are as many opi-nions as Writers - All these Remidies are to be given only according to the Circumstances of the fever; and if you can discover the state of this, it is sufficient - Dr Fordyce has many good Facts, but they are not so well arranged as I could wish; and there is much fluctuation in his Re-midies.

Gen. XXX. Scarlatina.

Char. "Synocha contagiosa —— Quarto morbi die facies "aliquantum tumens, simul in cute passim rubor floridus, "maculis amplis, tandem coalescentibus, post tres dies in "squamulas furfuraceas abiens." -

This and the Urticaria have been put toga-ther under one genus by Savauges - But a simple Comparison of the Characters and period of Eruption, shews they must be kept separate - The Scarlatina is doubtless a Specific contagion, yet rare, - Whenever it appears it is likely to become Epidemic and rife - I had two opportunities of Observing it - It appeared to be an Inflamatory disease; and so far it approaches to the Meazles - It has sometimes the Catarrhal Symp-toms that accompany them, but not so frequent, ex-cept you comprehend under the name of Catarrh more or less Angina, which is frequent here - As for their Season, the Scarlatina and Meazles may be

be propagated at any time, but more commonly in the winter season; which is one of the proofs of their Inflamatory tendency - The general Rule of Sydenham is good, that the Meazles prevail during the winter and Spring, and disappear with the Solstice - The same is to be said of Scarlatina; and this is the Course of the Diathesis Phlogistica - I have known the Meazles encrease in the summer; but this amounts to no more than that our summers are not so warm as to destroy the disposition in our Bodies to Inflamatory Diathesis -

The Scarlatina is of two Species, according as it is with or without angina - In the two Instances I have seen it, there was constantly angina, and I would doubt of the other Species, if I had not for it the authority of Sydenham, who does not once mention this symptom. accordingly Savauges does not mention it either, in his Character of Scarlatina - But he has the Scarlatina anginosa, which he says once prevailed at Montpelier - When the disease is without angina, it is mild and not dangerous, except when treated by the warm Regimen - But when there is angina, there is much Diathesis Phlogistica, the blood has the Inflamatory Crust, and the fever continues with, and even after the Eruption - It is found also to have the same Degree as the Meazles - This shews, that in our method of Cure Bleeding is the only remedy to be depended on - The Angina is commonly of the Phlegmonoid kind, and often ends in a suppuration of the Tonsils: But sometimes also

also it is Erysipelatous, with a brown ashy colour, and at last inducing gangrene of the Fauces - Though this is to be distinguished from the Gangrenosa angi-na, yet in the numerous Instances I had occasion twice to observe this disease, I have never seen any take the gangrenous turn; and I have never found the bark ne-cessary, though I have often been obliged to admit it in compliance to other Physicians - With regard to the Scarlatina Urticaria, which we call,

Gen. XXXI. Urticaria.

Char. "Febris emphimerina contagiosa ...... Die secundo rubo-"res maculosi, urticarum puncturas referentes interdiu fere eva-"nescentes, vespere cum febre redeuntes, et post paucos dies in "squamulas minutissimas penitus abeuntes."

This, as a Symptom, is a frequent disease, and as a symptom is it mentioned by Sydenham and others - It is doubt-ful, then, whether it is to be considered as a specific Contagion. I have just now a Patient liable to frequent feverish disorders, attended with much anxiety, Dyspnoea, suffocation, and Symp-toms of Miliaria. The Crisis of the disease is constantly with Urticaria - This leads me to say that it is often a symp-tom of an Erysipelatous Inflamation, which requires bleeding. But often it is but a Slight Eruption, attended with Fever in the Night and in the Morning only. -

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Gen. XXXII. Pemphigus

Char. Typhus Contagiosa. In Primo, secundo, aut tertio "morbi die in variis partibus vesiculæ, avellanæ magnitudine, "per plures dies manentes, tandem ichorem tenuem effundentes."

I have never seen this - and from the Records of Physic it appears very rare and uncommon - In this Country we have an Eruption which is certainly of this Genus, which we call Blebs. It consists of small Blisters of the size of small pox, or rather a little larger, filled with Serum: which soon break, and the Cuticle becomes squamous - Savauges mentions this as analogous to the Pestis benigna, or to the Variolæ without fever. - The Pemphigus Castrensis is attended with malignant fever, very likely Pestilential, and to be treated as such. -

Gen XXXIII. Aphtha.

Char.

I have frequently seen this, specially in Infants, hardly ever in Adults, where I would suppose it Idiopathic. It is accompanied with fever; but as I am absolutely at a loss on its nature, and as I can give you no account of the

Cir

circumstances of the mouth that bring it on, it is most
drefer you D Boerhaave and his Commentator Van Boer
-haave wrote in Holland where the disease is more fre
-quent in Adults, and treats it more fully than I could do.

Ord. IV. Hæmorrhagiæ.

Char. "Pyrexia cum profusione sanguinis absque vi externa;
"Sanguis missus ut in phlegmasiis. –

The establishing this Order of Pyrexia is new in Nosology – The three orders already treated, are in every system, united as Orders or Classes – But every one of the Systematics has missed this order of Hæmorrhagiæ, uniting it with that of fluxes in general: Fluxus in Sauvages, Morbi Evacuatorii of Linnæus, and Profluvia of Vogel – But this makes a very artificial Class, in which diseases of very different Natures are united. – Even in Hæmorrhagiæ they have not proceeded on the same plan that we have, they having united Hæmorrhagiæ ex vulnere with those from internal Causes, which are extremely different from each other – Hoffman is the only Systematic Writer that has arranged the Hæmorrhagiæ among the Morbi febriles.

The distinction of Active and Passive Hæmorr-hagy is admitted by every Physician. Passive Hæmorr-hagies are those that happen from breaking the Vessels, or from their Extremities being relaxed – The active proceed from

from encreased Impetus — It is this last we mean to treat of here — The passive are referred to Apocenoses, among the morbi Locales, whose character is, "Fluxus, sive sanguinis aut "humores alii solito uberius profluens, sine pyrexia impetuve "fluidorum aucto." — So that the distinction is plain.

Having thus ascertained our subject, I am to treat it, by first giving a more general Pathology and Cure of Hæmorrhagiæ, as an Order; and afterwards by considering the particular genera which constitute it — Any System which affords to premise generalities on each Order, applicable to each genus, is certainly the best and most natural — I think I may be clear and short here — There is no part of Physic more perfect. Our Doctrine is no where more clear, universal, and complete, I am sorry our time will not allow me to treat it as fully as I could wish — Much must be supposed known from the Institutions — However, I will supply this as well as I can.

There is in all active Hæmorrhagies a series of Phenomena, which runs thus. There is first all the appearances of fulness and Tension of the Part, from which the hæmorrhagy is to proceed. This is thus marked in Epistaxis, "Capitis dolor vel gravitas; faciei rubor;" and in Hæmoptosis, "Genarum rubor, molestia aut doloris, &c." Before the blood flows, a cold fit is formed; and it is during the succeeding hot fit that the blood flows — These fits are often evident — In other Cases they are more obscure: But this proves only that there are topical Hæmorrhagies as

as there are topical Inflamations - The flowing of the blood takes off the Congestion and Spasm, and with them the hot fit, and the flowing itself ceases. The blood is, as in Phlegmasiæ, covered with an Inflamatory crust, formed from the spontaneous separation of the Lymph - And as it is in Inflamations, so it may here be admitted as a proof of the Diathesis Phlogistica. From this series of Phenomena it appears, that the whole of the disease has its foundation in a Congestion, or preter-natural accumulation of blood in certain Vessels; which probably depends on some change of the distribution of the Blood, so as to change the ballance of the System - And after the flow is over, it is likely to be renewed several times, as the state of the balance of the System is not essentially changed. There is much affinity between Phlegmasiæ and Hæmorrhagiæ, and their Theories are pretty much the same. In Phlegmasiæ we have seen a Congestion somewhere formed, implying a difficult transmission of the blood: Hence the sense of Anxiety and Resistance, and afterwards the Reaction to overcome it - It is the same in Hæmorrhagiæ, only here the previous Congestion is more evident, and particularly subsists in red Vessels, which can readily open or break - Whereas in Inflamations, the affection is commonly in Membranes of a compact nature, whose vessels are not therefore so liable to open or break - The Stahlians, who made both diseases depend on a previous Congestion, are certainly so far the first Physicians in the right - But they were wrong in ascribing to them the

same

same final Causes, deduced from an Intelligent Being. I think we must suppose here a Physical necessity, whatever it may be — We can trace up active hæmorrhagies to Congestion, and therefore, to make the system Complete, we must examine the Causes of Congestion —

I think, first, we must suppose in the original Form or Texture of our Stamina, that there is a provision of Vessels fit to receive the Red blood sooner and in larger proportion than others — It is from hence only that we can explain the successive Evolutions, which take place in the parts of the Animal Œconomy — To this distribution of the blood, the solids are or should be exactly adapted — Sometimes it is so, and therefore there is no observable unequal distribution, and no disorder happening in Consequence of it — I could curiously point out, that the health of the animal body depends more on this than on any other Circumstance — But this is far from being always the Case: From different external Causes, or from a first Conformation, there is almost always some unequal distribution. Painters and Sculptors have observed different proportions of the head in Westphalia and in Attica — Thus far can we see in general — The blood Vessels of the animal body are always full and in a plethoric state, i.e. every vessel is stretched by its Contents beyond what it would be if left to itself, without any external force — That tension of the Vessels is absolutely necessary to the System, and, that it should not be disturbed, a particular balance

is

is required. - It is the disturbance of this only, that we call a morbid Plethora - Hence a relaxation in any one part must have a great share in changing the Tension of others -

I come next to the history of the Plethoric or Hæmorrhagic state of the human body in its different Ages - Observe, first, that it is necessary the animal Body should proceed from a small bulk to a greater - Nature has provided for this, by making the solid more lax in the first part of Life - While the Laxity is considerable, the Tension of the System which constitutes the morbid Plethora, will not readily appear - But as the solids constantly acquire firmness, the marks of the Plethoric state become more evident, as the Animal approaches to its full extension - accordingly it first appears at the time of Puberty - It is then that Hæmorrhagy chiefly appears, arising from a change in the balance of the System - For the purposes of the Animal Œconomy, the formation of the chief organ of Sense, the head, is the first finished - Therefore from the first beginning, a greater proportion of blood is sent there, and it is there that Hæmorrhagies first appear - Gradually, as the resistance in the head encreases, the determination to other parts is greater. Hence the Evolution of the genitals: Hence at that time the plethoric state is chiefly felt, and Hæmorrhagies of the Nose first appear - But still the general growth of

of the System is going on, and the Plethoric state will be more exquisitely felt at that time when the system is nearest its Acme - and as the Lungs are certainly in a due proportion with the rest of the system, so that though they have the smallest proportion of Vessels, yet the whole blood passes through them, the Plethoric state must be most evidently felt there - Hence at the time of the Acme Hemorrhagies from the Lungs appear - But very often the Concurrence of external Causes is also required, and therefore Hemorrhagies do not occur, But afterwards, and so long as the Arterial System is in a Plethoric state, till the balance of the arterial and Venous system is duely proportioned. Dr Whittingham Junr has given us some Experiments to shew, that till the Acme, the Veins have a greater density and thickness than the arteries; but that this changes with age, so that the last part of life, the Arteries become more thick and resisting, and a greater proportion of blood is thrown upon the Venous system - We suppose that the medium between these two states, is at thirty five, or nearly so, and till that age, or till the due proportion, hemorrhagies from the Arteries may occur, as Hippocrates has properly remarked of the Hemoptysis - after this age, Hemorrhagies arise from congestions in the Veins; and from that source we have sometimes even active Hemorrhagies. But that they are all of the Venous kind appears very clear from what has been said - If Congestions of blood are formed in

in the venous system, it will be where the motions of the blood are more slow, viz. in the System of the Vena Portarum: Hence Hæmorrhoids. But this is also another part of the venous system liable to this, viz. the Venous system of the brain - You know that there it wants all the Assistance it has in other parts, viz. the Nervous system - you also know that the head is particu-cularly constructed, so as to make the motion of the blood very slow there - Again, perhaps from the sooner determination of the blood there, and the more early formation of the head, the veins are sooner in a state of Congestion; and hence Apo-plexies, Palsies, &c. depending on Effusion in the Brain. I have thus shewn that Hæmorrhagies may be clearly traced to Congestion in particular parts, and this to a general Ple-thoric state, with particular Determinations - This is suf-ficient to enter on the method of Cure

The Proximate Cause of Hæmorrhagy depends on Congestion or accumulation of blood in some parti-cular set of vessels, which is an Irritation that produces a fever of an Inflamatory kind: and in Consequence of the in-creased Impetus the blood flows - The only difference, then, between Inflammation and Hæmorrhagy is the different state of the Vessels affected - In Hæmorrhagy they are liable to rupture: In Inflamation there are circumstances that ren-der them unfit to break - But the Cause of the Congestion we suppose often depends on original Conformation, by which some inequality is thrown into the balance: and the founda-tion of the Effect of this conformation is a Plethoric state of the System, or preternatural Tension; for it would in-

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influence a Lax habit.

This leads us a step farther. In what Cases is the animal body plethoric to this effect, and what are the circumstances attending that State? I observed, that the body in its first formation, is in a very Lax state; and advances considerably without discovering morbid tension of the Solids - It is only in Consequence of the Resistance of the Solids, that the bad effects of the Plethoric state discover themselves - When some portion of the System becomes more rigid and Resisting, the balance is changed - This happens at the time of Puberty: Hence at that age the Plethora is determined to the head, discovered by Hemorrhagies of the Nose - If by any inequality in the Ingesta and Excreta, the Plethora is more exquisite, its effects will be felt in the Vessels, which, in proportion to the quantity of blood passing through them, are the smallest. This applies to the Lungs - And therefore at that period the Hæmoptysis occurs, generally at the Acme - Here it is to be observed that the fullness of the Arterial System depends on its ballence with the Venous - The Arteries are more full in the beginning of Life; but their thickness and Density encreases with age; while the Venous System becomes fuller - And it is probable, from circumstances of human Life, that this change of balance happens at a medium about thirty five years of age - after that period, when the Arterial plethora no longer subsists, at least in a morbid degree, the balance is thrown on the venous system;

and

and its effects will chiefly appear in those parts where the circulation is slow, as in the System of the Vena Portarum - In Consequence of particular conformation, other parts of the system may also be affected - But a Plethoric state of the venous System in the head, will induce Hæmorrhagies of the Nose, Apoplexy, Palsy, &c. at the period of the venous Plethora.

Now we are able to enter into some general questions, with regard to the Practice of Hæmorrhagies.

1. How far is it to be Cured? No doubt it is often a salutary Excretion, to reestablish the balance of the System - This is the Capital Doctrine of the Stahlians - They alledged that the greatest fault of our System consists in a plethoric state, or too great a quantity of fluids, which, in consequence of αυτοκρατεια is relieved, they say, by Hæmorrhagy - They produce many instances of Hæmorrhagies of the Nose curing Apoplexy, Epilepsy, Palsy, &c.; and in such Cases in which we cannot perceive any morbid Symptom preceeding the Hæmorrhagy; yet they still say it was necessary, to keep a due ballance, because, if stopt, a violent disorder ensues - and they produce many instances of this - They are so far Right; but they have carried their Doctrine to Excess - They have considered every Hæmorrhagy as a salutary critical Evacuation, produced by Nature, to preserve a due balance of the System - Hæmorrhagies sometimes arise from particular Causes; Exercise, Posture, Passions, Intemperance, external Injuries, Irritation applied to particular Vessels, may produce active Hæ-

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Hæmorrhagies, when they operate on Places fitted for Congestion) - In such Cases, the Ceasing of these occasional Causes is necessary to stop the Hæmorrhagy, and is attended with no danger - It is only those Hæmorr-hagies that depend on evident Plethora, that require not to be stopt but with Caution - Nay, in some Cases the Hæmorrhagy may be necessary pro tempore; yet it may be prejudicial, if repeated - It is on the suppo-sition of plethoric Congestion being unavoidable, that we must indulge the present Hæmorrhagy; and this must be done only pro tempore - This would not return even in consequence of general Constitution or Repeti-tion of Occasional Causes, if there were not a change produced by repletion, so as to render it habitual - If there were no resistance offered to Hæmorrhagies, they would often proceed to the entire Exhaustion of the Sanguife-rous System - But there is such a Resistance in the Ex-cretories, and the degree of Evacuation depends on the ballance of these Excretories with the rest of the sys-tem - If a quantity of fluid be drawn from the blood Vessels (for the balance just now spoken of is between the red Vessels and the smaller orders), that quantity being renewed after the Evacuation, will very soon renew the former tension which produced it; for the balance of these Vessels depends on their Tone, this on their Tension, and this again on the quantity of their Contents.

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But as the Excretories have been for some time in a state of Collapse, they will become more rigid, and will more re-sist Excretion - Whence the accumulation will become greater than before - This is a truth both in Theory and in Practice - Thus we know by repeating artificial Bleeding, Venesection often becomes necessary - The Consequence of this is, that the Hemorrhagy prevents the Effects of Plethora pro tempore, but has a tendency to renew, confirm, and encrease it: Whence it is often to be avoided - The Stahlians have been particu-larly useful on this Subject of Hemorrhagies, by collect-ing all the facts relative to the Circumstances tending to give a plethoric state of the System; and they have had a great share in fixing our Doctrine on this subject - But their Excesses are to be avoided -

The first means of diminishing the Plethoric state, is to diminish the quantity of the Aliment. The greater the quantity of Ingesta is, the greater is that of the Excreta; and this makes the System much more liable to the dangerous effects of Variations, and to have its ballance changed - The same effect is better obtained by lowering the quality of the Diet at the same time. If you take off the Alimen-tary juice, the rest of the Ingesta will easily pass by the Excretions - It is the Alimentary matter that fills the red Vessels with red Globules, and thus gives a pletho-ric state - It is said that Hemorrhagy does not depend so much on general as on particular Congestion, and there-fore the quantity and quality of Diet do not make a dif-ference - They say that the Menstrual Flux, which depends on

on Plethora, proceeds always the same, under a great variety of Diets - This is but partly true; and if hemorrhagy is always accompanied with Diathesis Phlogistica, even when it should depend on particular plethora, the diminution of the Diathesis Phlogistica by Low Diet will certainly be useful, as that Diathesis is certainly dangerous -

Another means of diminishing the Diathesis Phlogistica is Exercise. This is particularly Explained from this, that Women are generally more plethoric than men, though they use a lower and less Diet. Exercise promotes the Excretions by dilating the Excretories - We know that it much promotes the Perspiration, and if violent, excites sweat; and therefore we conclude it is a most effectual means of diminishing Plethora - Every kind of motion may have this effect - We chiefly avoid that which is performed in the System by its own power, because it encreases the action of the heart and arteries - But in particular Congestions already formed, though Exercise has so great effect in diminishing the Plethoric state, by its action on the whole System, yet in such cases it is to be avoided, as encreasing the action of the Sanguiferous system, which may be dangerous - Yet bodily Exercise has been too much avoided - If the Congestion is not so well formed, it may be more useful to promote the Perspiration and Excretions, than hurtful by encreasing the action of the Sanguiferous System - But if violent and

and by Diet, it will produce a proportional Collapse in the force of the Circulation, chiefly in the Extreme vessels - Therefore there is nothing in which the Stahlians have been more useful, than in ordering a moderate constant Exercise. It will prevent topical determination when the Congestion is gradually introduced and supported in the whole system - Thus Sydenham recommends riding and constant moderate Exercise for Hæmoptysis - Some Physicians say that Sydenham has done much mischief in that way, because when there is actual Congestion, Exercise will produce a Rupture of the Vessels - But I have very curious facts against this opinion - I knew a Gentleman who was liable to a spitting of blood when quiet in his Chamber; but he could constantly remove it by Exercise - a Lady under the same Complaint almost made the Tour of Britain: after travelling eight or ten days it left her, but recurred again on resting for a few days only - Therefore Exercise, determining to the surface and diminishing internal Determination, is often useful, even in particular Determinations -

Bleeding may sometimes be useful by taking off the present, before it forms the Hæmorrhagy - But on account of its renewing the Plethora, it is a precarious practice; and we have reason to conclude, that when we have made the Venesection periodical, the renewal of the Plethora often anticipates the usual period, which, besides that it is a Rule never to bleed more than is necessary, may prove very dangerous, and will often disappoint us, by coming too

too late - and the Anticipation of Bleeding, itself will still more augment the Tendency to Plethora - Instead of Bleeding by Venesection (which I mean here) a Practice has been pro-posed to employ periodical Scarifications near the part where the Congestion is: and in the East this is a frequent Practice - But often we cannot bring those Scarifications near the part affected: and to the system in general they can be of little use, as the relaxation of this depends chiefly on the sudden Evacuation - Besides they are liable to all the objections brought against general bleeding - Therefore Blood-letting in any shape is allowable only in Cases of Necessity: But to trust to it for the prevention of the Plethora is precarious and dangerous - If bleeding is found necessary, we would rather attend to the Symptoms of Plethora than to its period; and in the repetition of it, we would rather antici-pate it, and employ it before the Plethora is quite formed, to prevent its full formation

Though it does not belong to this place, you may expect that I shall speak of Bleeding as a means of Revulsion: But now these Revulsions are very little trusted to. Dr Hoffman orders to bleed in the foot for Hæmorrhagies of superiour parts; but besides that it is difficult to produce there a free flow of blood by a full stream, I say that Vene-section in the Arm is as useful, because the chief dan-ger here comes from Phlogistic Diathesis - But when it is possible to bleed pretty near the part affected, I would do it - Thus, I would open the Jugular Vein for an Epistaxis, as the ensuing Relaxation would more readily extend to the part affected.

2. When the Hæmorrhagy is begun, the Stahlians think the Evacuation is a natural means, to be left to the Intelligence of Nature, who adapts its quantity to the Circumstances of the System - When the Plethora is fully formed, to be sure the Hæmorrhagy is necessary, and must not be stoped suddenly - But this by no means supersedes the necessity of Remedies employed to moderate the Evacuation, if at the same time you moderate the Plethora -

With regard to the Quantity, it is true that they bring instances of Hæmorrhagies stopt with dangerous Consequences; but on the other hand, they must allow that Hæmorrhagy often goes to Excess, even in Cases of Congestion; and in that Excess it must certainly favour the return of Congestion - The Evacuation arises from Physical necessity, and is suited, not to the Circumstances of the System, but to the present Diathesis Phlogistica, which may often push the Hæmorrhagy to an Excess - Therefore in all Cases we must employ all the remedies in our power to moderate the hæmorrhagy, if at the same time we take Care to moderate the Congestion. The Antiphlogistic Regimen, Bleeding, Refrigerants, astringents, and Ligatures, employed in that View, are all proper: We likewise sometimes attempt Vomiting and Blistering. The Antiphlogistic Regimen consists in avoiding all Irritations, as in Fevers and Inflammations. But chiefly here,

1. The external heat must be avoided, as it rarifies the Blood, and gives occasion to the Turgescence, which is the chief fault.

2. Motions of the part from which the Hæmorrhagy flows,

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as speaking Hæmoptoe, venereal Exercise in Menorrhagia, &c. –

3. Postures, which favour the Congestion, in consequence of the gravity of the Blood – Thus, in Epistaxis, an erect posture is best: in Menorrhagia that posture is the best which raises the lower parts of the Trunk above the superiour – With regard to Bleeding, we find it here further necessary than to diminish the quantity, viz. to diminish the Diathesis Phlogistica, which is better done by Venesection than arteriotomy – It has often been found that a Deliquium induced by bleeding, is the most powerful means of stoping hæmorrhagy. But it is difficult to say to what degree Bloodletting may be pushed – I see that the German Physicians are insufficient and too sparing in this – Hoffman prescribes to only ℥viij at most – The French have fallen into the other extreme, and Astruc advises in the Menorrhagia twelve considerable bleedings – This may be necessary in some Cases, but it is always dangerous, and has often brought on Dropsy. Except the French and English, Practitioners of other Countries prefer other means of stoping the Hæmorrhagy, as

Refrigerants, Nitre and acids. Hoffman prefers Nitre: but it seems to be scarcely possible to give it in sufficient quantity as a Refrigerant – But it may be useful as determining to the surface, as a Laxative, and as Sedative, except in the Hæmorrhagy of the Lungs, where it is stimulant – In a larger quantity it will bring on Nausea, Vomiting, and Excessive Purging. As a Refrigerant, we have the acids, which are much better – Here there is less restriction – We give the Vitri

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Vitriolic Acid in very great quantity, and still more the Vegetable Acids — It is but lately a noted Practitioner in London has given in fevers to the quantity of half a pint of Lemon Juice a day, assisted with Vinegar and fossil acids — In this quantity they can be used, I have no doubt of its being a very powerful Refrigerant, determining to the surface.

Ligatures. It has been said, that to prevent the return of blood to the heart by Ligatures, is a very good means of stopping Hemorrhagy — But it is difficult to compress the Veins only — But in a very short time it will prevent the free circulation of the blood to the Extremities, as the Extreme arteries will soon be affected; and in this way they may prove Extremely dangerous.

Astringents. It is from these the Stahlians fear those dreadful Consequences, which they imagine will happen from stopping the Hemorrhagy But I would alledge that internal astringents are very safe, as their power is very inconsiderable, and as it can scarce be supposed that they may run through the whole course of the blood to be applied to the hemorrhagic part, and thus stop the Hemorrhagy — Whether or not a sudden constriction of the nervous system may not have some effect, I would not determine — as for particulars, I know no vegetable astringent, of which there is good Testimony of its Virtues — Fossil astringents only are powerful; and of these we have,

1. Metalline.

2. Saline Astringents.

Among the former, we have the Chalybeates. Some Styptics are of this kind, and are sometimes efficacious; but I have often seen them used without effect. Lead is more efficacious; but the preparations of this metal are dangerous - I have spoken of it on the subject of Inflammations - I have no doubt but it can very readily diminish the Tone of the System; but I would be very cautious in its use, as it has a strong narcotic power, and particularly disposes to Spasms in the Primæ Viæ; whence the Colica Saturnina. The Tinctura Saturnina or Antiphthisica has been much employed; but from a Chymical analysis of it, I think it very innocent and inefficacious, because the Saccharum Saturninum is not therein its proper form, being, I think, as much a Chalybeate as a Saturnine preparation - However, as it still retains some Lead, I would urge it with Caution, chiefly as I have so often seen it ineffectual -

As for Saline Astringents, Alum has often been given to the quantity of ℥iij in twelve hours - I have given it myself, and must own that I have sometimes seen it useful in Hæmorrhagies; yet as Hæmorrhagies stop of themselves, all Remedies of this kind to stop them are uncertain. If any are useful, this is the best -

The external application of Astringents is more powerful and dangerous. As for their management in that way, I refer you to the Surgeons - A Powerful and safe one is the application of Cold, internal and External. I have had

had occasion to say, that partial and transitory applica-tions of cold may prove a powerful stimulus to the part to which it is in Contact - But when the application of it is more continued and more general, I think Cold always acts as a Sedative - It is very common to apply cold to the Genitals of men to stop Hæmorrhagies - I have known Bathing the feet in cold water stop an Uterine Hæmorrhagy. Wet Cloths round the neck are said to stop Epistaxis. Ob-serve that Cold in stopping Hæmorrhagy determines to the Surface, and is therefore less dangerous, chiefly if used internally. I have spoke of the Diæta aqua of the Itali-ans - This joined to the use of Nitre will probably, as determining to the Surface and as a Sedative, be a very powerful remidy -

These are the Remidies adapted to stop Hæmorr-hagies; but in long continued and dangerous Cases, we have still vomiting and Blistering. So long as Blisters were thought to stimulate the Sanguiferous System much, they were not used - But before I learned from theory that this power was to be regarded, Experience had taught me their great use in Hæmorrhagies; and now I can perceive how, by preventing the Diathesis Phlogistica, they may be useful - But in Cases of Uterine hæmorrhagy, the strangury they are apt to induce, must be carefully avoided, as a powerful Irritation to the neighbouring parts.

Vomiting, employed in any Case of Hæmorr-hagy, disposes to the return of it - Dr Bryan Robin-son of Dublin, who endeavoured to Cure Hæmoptoe

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by Vomiting, gives for the reason of their effect, that the sickness they induce occasions a Pulse very small and weak - But it is difficult to distinguish this effect from the following, exciting the System. I would rather explain their action in Hemorrhagy from their power of determining to the Surface, which is confirmed by the analogy of cold water and Nitre.

There is but one Remedy remaining, which might be called the modern Panacea, viz, the Bark, which is employed in Hemorrhagies; but it is difficult to determine in what Cases it is proper, and how it operates - As an Astringent, I consider it as having very little efficacy, like all other Vegetable astringents - We might expect that it would rather prove a Tonic, or a Cause of stronger action, and thus encrease the flow - But it is however in its tonic power that the use of the Bark depends in some Cases of Hemorrhagy, chiefly in those of the Uterus, which depend more on a loss of Tone in the Vessels, than upon encreased Impetus or general Plethora - There the Bark may be useful - But observe that these are Passive, not active Hemorrhagies - But even in Active Hemorrhagies it may be sometimes useful - These consist of feverish Paroxysms - Thus the Hemoptoe will chiefly occur when the febrile Paroxysm returns; and when we can mark these periodical Remissions, I doubt not that the Bark may be useful - But in most Cases where a plethoric state and a Congestion are the foundation of the

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the Hæmorrhagy, the Bark, by preventing the reaction, may prove very dangerous, as the Stahlians have alledged. It is particularly in Cases of feverish Paroxysms, with a determination to a particular sett of vessels, in consequence of their Laxity, or of their being disposed to receive more blood, without any previous general Congestion, that the Bark may be useful - But it is difficult to make this distinction in Practice -

I come next to our several Genera. I have limitted them to a smaller number than other Systematics, excluding those that are constantly or more generally symptomatic. See the several Genera of Sauvages, page 76. - Hæmorrhagia and Hæmoptysis we have taken - Stomacace is only a symptom of a Scurvy, and therefore little to be attended to as an active Hæmorrhagy - Hæmatemasis I have rejected, as being rarely and Idiopathic affection - The only instances we know of it are when it is a symptom of Suppressed Menses, of Ulcerations of the Stomach, of Melæna, of violence external, or internal by Vomiting - all such Cases are Symptomatic, and therefore do not enter into our System. Hæmaturia always attends some other affection of the Urinary passages, such as stones, Ulcers, Tubercles, &c - Menorrhagia we take in, comprehending under it the Abortus. Sauvages has added Fluxus Sanguinolenti, such as the Hepatirrhœa - I do not know this, and imagine the antients were mistaken in it - The Hæmorrhois we take - The Dysenteria is an Excretion not naturally sanguineous - The Melæna, as an Hæmorrhagy

Hæmorrhagy, is only a Symptom. The Cholerica of Linnæus is the Hepatirrhœa of Savauges; and for the rest he agrees with him: Therefore our Criticism of Savauges applies to him - It also applies to Vogel, though he has added many Genera.

Gen. XXXIV. Epistaxis.

Char. "Capitis dolor vel gravitas; faciei rubor; profusio san-guinis e naribus."

This is a new Term applied to Hæmorrhagies of the Nose - These, in Savauges, are named Hæmorrhagia, because Hippocrates often employed that term in the same sense; But as Hippocrates often employed it also in a more general sense, according to the Rules of Nomenclature, another name was to be given to this Genus - Vogel has properly called it Epistaxis; and though this term is employed in Hippocrates for Stillicidium Narium only, yet as it was employed by one Systematic, that I might not form a new name, I have taken it.

As for the Pathology, I have already given - It depends on a congestion of the Vessels of the Head, arterial or venous - It is the Arterious only that we consider - In no part of the body is there such a Network of Vessels on an external surface, nor on such a loose membrance as that of the Nose, nor covered with so loose Teguments - Hence the yielding of these Vessels, and the frequency of Hæmorrhagy at any period of Life - Nothing more favours the Stahlians Doctrine of Hæmorrhagies

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being efforts of an Intelligent Nature than Epistaxis, which really seems often intended as an Outlet to relieve the brain. For the Membrane of the Nose is not only furnished with Vessels by the External Carotids, but also receives many branches from the internal Carotids. Nothing more is necessary to explain that Hæmorrhagy; and as a crisis of many diseases of the head, it is to be treated of hereafter, as founded on a plethoric state—

With regard to the Cure, I have little to add to our general plan— yet I must say with regard to Antiphlogistic Purgatives, that as they are adapted in Hæmorrhagies in general, and Inflammations, chiefly to Cases where a Revulsion is wanted, they are particularly fitted for the Epistaxis.

Gen. XXXV. Hæmoptysis.

Char. "Genarum rubor; molestiæ aut doloris et aliquando caloris "in pectore sensus; dyspnoea; titillatio faucium; tussis aut tussicula sanguinem floridum sæpe spumosum rejiciens."

The Pathology of this is not clearly understood, chiefly with regard to its Consequences— Why and when it is of more or less Consequence— It is seldom fatal as a Hæmorrhagy. Sometimes indeed it proves so by the suddenness and quantity of the Evacuation— But these are very rare instances, and it is much more commonly fatal by inducing a Phthisis Pulmonalis— Why does it induce it? This is commonly accounted for by saying, that a Rupture of the Vessels in the Lungs does not heal, but is kept open and determined to

Ulcera

Ulceration because of the constant motion of the parts, which hinders conglutination - But I do not think this well founded. It is only violent Inspirations that the Lungs can be moved so as to produce that effect - Their motion is very gentle, and performed as it were upon Joints unfolding themselves, or encreasing their Angles - Besides, this is not true in fact - We have many Instances of Rupture in the Lungs from external violence, which have healed, as Surgeons say, by the first Intention. Therefore, if Hæmoptysis returns, it must be rather owing to Plethora or encreased Impetus - I was treating yesterday of a Case of Hæmoptysis in the Clinical Ward, where the flow entirely disappeared with the feverish Paroxysm - I must say farther, that even the frequent return of such a Cause is not sufficient to produce Ulceration - We have many instances of Hæmoptysis repeated many times on a suppression of Menses, without Phthisis; and in the Records of Physic, we have many such instances, whatever be the Cause of Hæmoptoes - I knew a Gentleman of 70. who died, after having had, I dare say, 30. times an Hæmoptysis, without having ever any Symptoms of Phthisis - Hoffman, treating of Hæmoptysis, quotes Hippocrates to shew, that that disease happens very differently in different persons, and often without Phthisis - Therefore in Hæmoptysis, the simple Hæmorrhagy is probably not attended with Phthisis -

An Ulceration, if even formed, is not incurable. It is said that the Exposure of the part to air does not

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admit of the formation of Pus - But it is doubtful whether this Exposure has the Consequence there, as on the external surface: For,

1. It is not cold Air that is received there, but air warm-ed by the Mouth and fauces.

2. The Lungs are not exposed to dry Exhalations, which chiefly hinder the formation of Pus - and the continual moisture with which they are covered will defend and heal them in the same way that a Dog cures his sores by lick-ing them - Therefore there is nothing here that should ren-der Ulcerations incurable - There are in fact many Ins-tances of Ulcerations after Pleurisy and Peripneumony, which have been Cured - Allow me to say, then, that it is proba-bly on a Cacoethic state of the System that Phthisis depends - It is chiefly in persons of a Scrophulous habit that Phthisis appears; and in this Country Phthisical persons are almost always scrophulous - A Tubercle formed in the Lymphatic Glands, and of the scrophulous kind, is gene-rally the foundation of Phthisis - Nothing is more common in Dissections of Phthisical persons than to find such Tuber-cles dispersed through the Lungs - These may come to Suppuration without the Concurrence of Hæmoptoe, but more commonly with it - The Passages of the Vessels of the Lungs to the Bronchiæ, are so short and exposed, that they are very liable to rupture, but chiefly when stretched by a neighbouring Tubercle - There is no part of the body exposed to such inequalities of Circulation as the

the Lungs, and therefore they are more liable to Rupture. This applies only to the Case of Scrophula - But I have given the Phthisis as a Sequela of Hæmoptysis, and the Scrophulous Tubercles are not the only Cause of Phthisis. Tubercles have been found dispersed through every part of the Lungs - There are in the Lungs a great number of Conglo-bate glands, but that they are so dispersed as these Tuber-cles, we are not taught by Anatomy. Therefore we sup-pose that other Tubercles, besides scrophulous ones, may arise - The determination to the Lungs may often be in so slight a degree, as to produce an Effusion in the cel-lular substance only, which may encrease till it forms a Cyst and a Tubercle which will produce the same effect as the Scrophulous one - We have no other way of accounting for Tubercles formed in other parts of the body - It is observed that people exposed to much dust, such as Stone Cutters, Millers, &c are frequently liable to Phthisis, when there is no other Symptom of a Con-stitution that could produce this - It is therefore to be supposed that the dust may enter the Trachea, and be accumulated in some part of the Bronchia, and thus form a Congestion and a Tubercle. The Lymphatics are not owing to Scrophula alone, but may also arise from Acrimony, such as Venereal, Scorbutic, or Exan-thematic matter, chiefly that of the Meazles. Inde-pendant of Lymphatic glands, Tubercles may arise in the Cellular Substance (from Effusions) which may be of various kinds - We have instances of Calculous

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Concretions in consequence of that - This shews we must not pretend to limit the Nature of the Effused matter - These effused matters are very different however from those occurring in Consequence of Inflamation, which are the only foundation of Pus - Therefore Ulcerations may be formed where, instead of Pus, there will be an Effusion Mali moris, as they say; and therefore incurable, as in Phthisis - The Hæmoptysis is probably not the sole cause of Phthisis - When, therefore, we have an Hæmoptysis ending in Phthisis, we suppose it only a Symptoma Causæ - There are four chief sources of Phthisis -

1. Inflamation.
2. Hæmorrhagy.
3. Catarrh.
4. Tubercle.

But the first three are Causes of Phthisis, by producing Tubercle or something analagous to it - Inflamations sometimes produce Phthisis - But when we have so many instances of their being Cured, even after Suppuration, we may suppose that the produce it only in Consequence of a Tubercle formed by an Effusion - We have no good reason to believe that Hæmorrhagy induces Ulcers or incurable Ulcerations. But it is not necessary to suppose a Tubercle to induce Phthisis - In Hæmoptoe there may be some blood remaining in some part of the Bronchia, which by stagnation will corrupt, and produce the same bad effects as

as a Tubercle, viz. Phthisis.

As for Catarrh, it may be referred,

a. To a contagious matter introduced, and determined from its nature to the mucous glands.

β. To obstruction of the matter of Perspiration, in consequence of which there is a more copious determination to the mucous glands.

γ. But more regularly and generally, any irritation of the Lungs that can produce Cough, which may at length encrease the afflux to the mucous glands, and give the appearance of Catarrh.

Contagion, the first Cause, never operates for a long time, and never operates unless the second, Obstructed Perspiration, at the same time concurs. With regard to the third, here the Catarrh is purely a Symptom of another Affection, and is not a proper disease. Therefore the second Cause, viz. Obstructed Perspiration, which frequently proves obstinate from a renewal of Obstructing Causes, is the only one we must consider, to find in it the Cause of Phthisis. Supposing, then, this Cause, thus rendered obstinate, a constant agitation of the Lungs is induced by the Cough, the afflux is encreased, and often a spitting of blood formed. Besides, frequent Cough often occasions some inequalities in the Circulation of the blood through the Lungs: Whence it is easy to see how this may occasion those effects which are the foundation of the Tubercle.

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All this is pretty clear - But the mucous secretion by the mucous glands often appears like Pus - We have an example of this in Coryza, Catarrh, Gonorrhoea, and, perhaps, some others - Is it then truly changed to a purulent matter?, Or is it only so chang-ed as to afford an Acrimony, which may leave all the effects of Pus, producing Hectic Fever, &c? This Con-jecture is not without probability, but is still very un-certain - This would Explain Dr De Haens account of Phthisis from Inflamation without suppuration - He explains it indeed by supposing the suppuration in the blood; but I formerly rendered it probable that this does not take place: yet this Case of De Haen is very rare - Of 100 Dissections, scarcely one shews such Effusion of Serum in the mucous Glands; but in the Cavities of the Bronchiæ there may be Effu-sions, which stagnating there, may be changed into Pus - Whether this is the Case in Phthisis induced by Catarrh, I will not say - In saying that a Cough from Irritation will produce a Catarrh in Consequence of encreased afflux, I forgot the Proof. I have seen an hundred instances of Phthisis from Catarrh - Very often the Excretion was of a saline taste, and appeared dry; but it soon proved humid - Hence it has been concluded that dry cough may induce Phthisis. But upon observation, from the Transparency, Viscidity, & want of Odour of the Expectoration, even when accom-panied with Pus, I think there is always an encreased

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secretion of Mucus.

The fourth Source of Phthisis is discovered by the absence of the three first - Hence it is probable that very generally Phthisis arises from a Tubercle; and by its intervention, from other Causes - From this Consideration you may easily deduce the Species of this disease, and refer to Authors for them.

Cure. I know none adapt to the last stages of the disease in Tubercles and Ulcerations - But let us consider the Remedies proposed - With regard to the Tubercle, we might suppose it depended on Scrophula, and accordingly attempt the Cure - But even on this footing, after forty years Practice, I know no remedy for Scrophula, at least in a few months; though by the progress of Life it is often mended - I know no Remedies to shorten the process - Saline Waters have been employed, and I think Sea water is the most useful of all - This however will not apply to Tubercles in the Lungs - all Practitioners agree that on the approach of a Phthisis, saline waters are to be avoided, as irritating and encreasing the Cough - With regard to Tubercles of another nature, I cannot say what is adapted to them, as I have not the slightest Idea of their nature - I know, therefore, no Remedy for Tubercles of the Lungs -

The Bark has been proposed for Scrophula, but

but I cannot say much for its use in that disease. I have seen it in a few Cases useful, but often hurtful. But this cannot apply to the Lungs, unless we could have some warning of ~~Formation~~ of Tubercles there; which we cannot discover to exist before they have arrived at an Inflamatory state, in which, from Analogy and Experience, I should rather think the Bark useless and dangerous. I have never seen it given in such Cases without bad Effect. I had a Patient affected with Cough and other Symptoms of Phthisis. He had at noon periodical returns of feverish Paroxysms. I suspected there might be an Intermittents, as I have known some Intermittents attended with much Cough. I employed the Bark with success. It prevented the Paroxysms, but they constantly returned. I attributed this to the obstinacy of the Intermittent, and repeated the bark to ℥x in six hours. It stopt the fits for a considerable time. The Patient recovered his flesh and strength. However he had still from time to time some fits, not so cold indeed, but attended with manifest Exacerbations. I advised him to go to a warmer Climate: but trusting to these appearances of good health, he staid here. But in the beginning of Winter there was a considerable encrease of his Symptoms, with a copious purulent Expectoration; and he died after three weeks. I conclude from hence, that the Bark, which I suppose hastened his exit, is not applicable in Cases of Tubercles of the Lungs, whatever it may be for Scrophula in general. As for the Ulceration that

that follow, we know no remedy. When we cure Ulcers, it is by external Remedies, intended to form good Pus. I know no internal Remedy that may be said to be a good vulnerary, and they are all neglected now, as such, at least in this Country. The famous Vulnerary of Switzerland, is nothing but a random Farrago. Mercury, which cures external Ulcers, has sometimes been found to Cure internal ones; and has accordingly been tried by a Physician of this City in Phthisis. But in all the trials I have made, it appeared rather to aggrevate the disease. Mercury may expel acrimony from the blood, as in the Venereal Disease; or by encreasing Inflamation, form Externally good Pus; but as a powerful Stimulus it may often dangerously encrease the Inflamation of the Lungs. We know that Scirrhus and Cancer, so far from being relieved, are aggrevated by it. As we do not know the nature of Tubercles, we cannot decide positively against the use of Mercury. But it may be dangerous, and we have no Instances of its good effects in Phthisis.

Balsamics are also hurtful by their Stimulus. Therefore the Cure of Tubercles must be left to Nature, taking to avoid particular irritation to the Lungs:– Therefore whatever relates to the Practice in pure Hæmoptysis and Phthisis, comes under the same view. We have here four Indications.

1. To obviate the plethoric state of the system, and to take it off when present.

2. To take off the Diathesis Phlogistica, particularly connected with Hæmorrhagy.

3. To take off the particular Determination to the Lungs.
4. To restore the determination to the Surface.

The first Indication requires the Low Diet formerly mentioned; and if there be any doubt of its use that ways, it is at least useful as diminishing the Diathesis Phlogistica. Vegetable Diet is therefore the best, particularly fresh fruits, as being a part of Low diet, and as Refrigerants. Within these few years much has been said on this. That they may have a great share in relieving this disease, I perceive; but not by dissolving the Tubercles, as has been said. Though the lowest diet is most necessary on the approach of the disease, yet it is hurtful after its full formation - I have often seen bad Effects from it, as not nourishing enough - The milk diet is the best - It is chiefly the Diathesis Phlogistica that we are to guard against, it is true, as cold encreases the determination inwards, diminishing it without, its effects are to be avoided - Debility encreases these, and the best means of removing this debility, is the Milk Diet. When a Plethora is already formed, Bleeding is the best Remedy, of which I have said enough -

The second Indication is to be fulfilled by Bleeding and the Antiphlogistic Regimen in all its parts, chiefly avoiding heat, which is a dangerous stimulus, and may encrease the Hæmorrhagy rarifying the blood. On the other hand, we have learned that Cold climates and Seasons encrease Phthisical Complaints - But the too great heat of warm Climates

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in summer is very prejudicial, and will very much in-crease the Progress of the disease - Nothing is more ne-cessary than to study a proper, moderate, constant Tem-perature, between 56° and 64°. - Warm Cloathing is absolutely necessary - The use of a flannel Shirt will keep the body in a due Tenor, which will give an Out-let to the warm atmosphere, and at the same time pre-vent the Excess of Cold - But keeping too much in warm Chambers is very pernicious - It is here par-ticularly necessary to avoid the Irritation of the motion of the Lungs - It has been alledged that persons engaged by their business to great motion of the Lungs, are more liable to Phthisis than others - Whether this would prima-rily bring it on, I know not; but upon the slightest Predisposition it would certainly encrease the determi-nation - Hence the Concionatores, Mercatores inferioris Ordinis - Professors are most liable to Phthi-sis

To take off the Determination to the Lungs, Blisters and Issues have been proposed - But as the best means of doing this is the same as we employ to deter-mine to the surface, I was in suspence whether I should join these two Indications under one. We have here chiefly two means.

a. To avoid Cold by warm Cloathing, and even by re-pairing to warm Climates -

B. Various Exercises. Gestation only, is admissible when the determination to the Lungs is once established, such as riding in a Coach or Sailing - Riding on horse-back

horseback, in as far as it conjoins a moderate quantity of bodily Exercise, is the best. It has besides the advantage of a free and cool air, which by ventilation constantly absorbs the atmosphere of our Effluvia, and so determines to the surface. Cold air, when assisted by Exercise, promotes the Perspiration; and on this account Boerhaave observes that no Exercise promotes Perspiration so much as Skating. As Exercise in general, by determining to the surface, compensates the bad effects of encreased impetus, I have often seen Phthisical Patients much the better for it. However this is not always the Case. There are some weak Lungs that will be the worse for Exercise, and these cases, altho' rare, may disappoint us. As Exercise is chiefly useful when moderate and constant, the gentle motion of sailing, assisted by the free air of the sea, is certainly a most effectual Remedy. The Antients did not know this. a good while indeed before Dr Gilchrist we have instances of its good effects. But he has put them in a much better Light; but though this is not able perhaps perfectly to cure a complete Phthisis, yet I am persuaded it has a great share in relieving the symptoms, preventing the disease before it is formed, and protracting Life.

Emetics we would suppose have a great effect in determining to the surface; and therefore might be supposed useful in Phthisis. Yet as they give much mo-

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motion, and thus encrease the Impetus of the Blood, perhaps they may be hurtful in Hæmoptysis - Dr Bryan Robinson of Dublin, in his book on the Virtues and effects of Medicines, has proved by many Cases that they may be employed with advantage - Of nine or ten Cases, only three were cured by Emetics, but the Rest were not the worse for them, and were even much relieved. I knew long ago a gentleman who boasted of curing any disease by Emetics; and I know that he often practised it with advantage - He told me once that a Phthisical person of his acquaintance had, on the 50th Emetic, vomited up a membraneous substance, which I think might be the Cyst of a Tubercle, detached all around by Suppuration, as happens in gangrene - It was attended with advantage in many Cases, but once it had a contrary effect, and Hæmorrhagy ensued - I tried them several years ago in this Infirmary in actual Hæmoptoe with advantage; but in a sin-gle it was evident that the Emetics were hurtful, which put an end to our Practice

Menorrhagia.

Char. "Dorsi, lumborum, ventris, parturientium instar "dolores; menstruorum copiosior, vel sanguinis e vagina "praeter ordinem fluxus."

The Hæmorrhagy is here natural and very

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universal in the female Constitution. What we have to say must, then, have a reference to the Theory of menstrual Flux; and I must shortly lay before you the general Doctrine. The animal body is always, properly speaking, in a plethoric state, i.e. the fibres of its vessels are stretched beyond its natural state. This happens in consequence of a ballance between the Excretories and the rest of the System; and this Plethoric state will subsist till the whole body is evolved, and the balance becomes equal and complete - The Evolution of the Uterus, therefore, is performed like that of other parts, and once formed, it would remain so, were it not for the peculiar conformation of its Extreme Vessels, which are so dilated and open, and so anastomosed as to be able to give way after Evolution - But their giving way is neither constant nor passive, but attended, like other Hæmorrhagies, with congestion, and therefore with horror, cold feet, &c. When the Evolution has arrived at at a certain degree, the depletion that is made is chiefly of the Vessels themselves of the Uterus - The Physicians that have treated of the sanguineous system, have not attended to the contractility of the Vessels; but proceeding on the supposition of rigid Vessels, trace up the effect of the Evacuation from the branches to the Trunk, and from this to the heart - This is not the Case - On Evacuation in one part, the Vessels of that part contract, and oppose

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a resistance to the Vis à Tergo; and here particularly the de-pletion is more considerable with regard to the Uterus than the rest of the system - The Vessels that contract are emp-tied, and returning to their former state, the Hemorrhagy ceases - But as their balance with the rest of the system is changed by that Relaxation, and as they now resist less perhaps, at least not more, than they did a year before the Eruption, they are again liable to Congestion, and in consequence to Hemorrhagy, and soon; and the period of this is generally a month - It is enough that the partial plethora should return to the bringing on the periodical return of the menstrual Flux: and a morbid general plethora is by no means necessary - The regular peri-odical discharge from the uterus, will continue under the different states of the general System. This has been a diffi-culty, but nothing is more easily understood - When the mass of the system is augmented or diminished, that augmentation or diminution is equal distributed to all parts, and there-fore will not particularly affect the Uterus, nor consequent-ly the menstrual flux, except the change be considera-ble - We see many such Instances of general Changes not particularly affecting any part - But here there is still more. The Hypogastric Artery has not been found much enlarged by pregnancy: Hence we conclude that the Uterus is a system very distinct from the general one, and that it is chiefly on the ballance of its vessels, with their Ex-

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Extremities, that the Phenomena of Menstruation depends. though the first Eruption of the menstrual flux is much connected with the general System, yet as it proceeds it comes to be much less connected with it, but continues the discharge from habit — We know that such is the effect of habit, that though the Causes of certain operations and sensations do not return, yet these Operations or Sensati-ons return at the same period — Thus if a man has been accustomed to make water on going to bed, as soon as he puts of his breeches, the Sensation exciting him to make water returns, though he should have emptied his blad-der but half an hour before — So it is with the Uterus. after the habit of the discharge has been much con-firmed, its period returns always more and more ex-actly — Therefore we conclude that the Uterus is a very distinct System, and that its ballance with the rest of the System has little influence on the Menstrual flux, as this chiefly depends on the ballance of the Vessels of the Uterus with their Extremities

Now to consider it more particularly as a Disease. It is so, when Excessive or Preternatural, which gives rise to two Species, The Menorrhagia and the Abortus. The first is an excess in quantity — But I find it difficult to determine the Limits of this. Different Systems are lia-ble to different quantities of Evacuation: Therefore our stand-ard must be taken from the same person — Generally those in whom the Evacuation is more considerable, have it by long

longer Intervals, and vice versa - yet this is often subject to aberrations, and therefore the Women themselves are not much afraid of these, and make allowances - Those Symptoms that attend Labour, attend also this Excessive Hæmorrhagy of the Uterus - Pains of the Loins and back, marks of strong efforts to the Uterus, general debility and paleness, affections of the Stomach, chiefly marks of dissolution of the blood, by allowing it to run out, forming anasarcous swellings, encreased Impetus of the Vessels of the Uterus, relaxation of the solids, &c. These determine it to be a disease; but in point of Quantity, the Women are disposed to admit of a great Latitude - As for the Causes, they are,

1. Morbid Plethora. Though we have said that the Uterus comes by time to be Independant of the System, yet it is often influenced by it. Full Diet, much Exercise, and warm Climates, favour this Excess.

2. There is in the manner of living a particular Circumstance, which also is very apt to favour it, viz. free use of Spiritous Liquors - the fact I am certain of, though the Theory of it is doubtful - It appears to me that Opium favours Congestion; but from what Cause, whether from encreased Impetus of the blood, I leave you to determine - But from its Effects in Asia, it seems that it encreases this Hæmorrhagy both in quantity and anticipation of period; and I have known similar Instances even in this Country - But particularly here Drinkers of Spiritous Liquors, have certainly that Flux more Excessive and of longer continuance - I have

scarcely

scarcely known a contrary fact - It is a thing which becomes habitual to Women, and which they often practise by them-selves; and when ever you find this ailment considerable, you may always suspect and enquire into this Circum-stance - They are not drawn in to hard drinking from the pleasures of the Table, as is the Case with men, but by Com-plaints, Hysterics, &c. I never knew a drunken woman, who (and I have known many) did not menstruate to Excess.

3. Conformation of the Uterus, which in some systems may admit of a larger accumulation, and consequently of a larger evacuation of blood - We judge of this from the early appearance of the Menses - There are Women neither large nor Plethoric, who have them very early, which is always a proof that the Uterus is of such a Conformation as sooner to admit of Evolution - When we have an opportunity to observe the Circumstances of the Menstrual flux in gene-ral, we find its quantity not at all proportioned to the size of the body - There are small Women who have the Menses in very great quantity - When this fault comes from Nature, it can scarce be rectified - But

4. It is often acquired, as by Pregnancy. If we consider to what a prodigious degree the vessels of the Uterus in preg-nant women are enlarged, it is no wonder, we shall find, that they remain enlarged afterwards, and admit of greater accu-mulation: and Women always menstruate in proportion to their frequent Pregnancies.

5. Every means of encreasing the determination of blood to the Uterus, by irritations applied to the part itself, as by Ex-

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Excess of Venery, which has been prescribed as a remedy to correct the fault of Nature in the contrary Excess - as far as my Observation goes, Salacious Women in general have this flow much more considerable - I do not however always impute it to the Coitus; for the greater determination of blood to the Uterus may be a Stimulus to Venery and excite desire - This Stimulus, for want of Philosophy to govern our inclinations, encreases the Exercise, and therefore the determination.

6. Habitual Costiveness is another Irritation. Most wo-men are liable to this, and still more liable to neglect it. They allow the faeces to remain till they become hardened, and the Efforts to discharge them must press on the Uterus. By this means I have known the Evacuation brought on at an improper period, and, when present, greatly encreased.

7. Laxity of the extreme Vessels of the Uterus, which allows them to yield more (It may often be referred to a want of Tone of the System in general, appearing in those vessels only, which are most exposed to a determination of blood) - But independant of such general Atony, there is often a partial Laxity of these vessels, acquired from considerable Evacuations, &c. - Which is confirmed by this, that such Cases are often attended with fluor Albus, which con-tinues longer - Every disease requires a remedy, and conse-quently this also, not only because dangerous in itself and by being liable to encrease, but also because it is,

I think, a frequent Cause of Barrenness - Conception is a difficult subject to me, but I can conceive it necessary for it, that the Extremities of the Vessels of the Uterus should be constricted for nine months; and if the atony prevents this, Barrenness must ensue.

Cure. The Antiphlogistic Regimen and Low diet are proper here, as in Hæmorrhagy - But observe that the Hæmorrhagies we have considered are active Hæmorrhagies: But here it is partly active and partly passive - Though there be no encreased Impetus, the simple impetus of the blood as usual may be too great for the time; and Women themselves are conscious, that even in a state of Debility and Laxity, Low Diet is necessary in such Cases - The other parts also of this regimen must be attended to; and every means of encreasing the Impetus of the blood in gene-ral and and determination to the Uterus, must particu-larly be avoided - Thus in the time of Menstruation, motion and erect postures are to be avoided - As a part of this Regimen, abstinence from Venery is parti-cularly necessary - But though this Remedy must enter into every System, it is often neglected in practice. I seldom impose this Injunction, as it is not likely to be followed, and few women will admit even the supposition of its necessity - Most Women in such cases will say to their husbands, what the Wife of Paulo Purganti said to him, "if I die, it is for Love of you!"

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Attention must also be had to mend the Costiveness of the habit, which must be done only by gentle Laxatives. Here I have found Sulphur chiefly useful, which though it does not operate always in the same degree, yet when it operates it keeps up the Evacuation without giving any Irritation to the Rectum - Determinations to the Uterus must always be avoided - I dare not speak of the means of doing this, because of the Delicacy of our Women. I have sometimes found Blisters useful, but exercise is the chief Remedy by determining to the Surface - When the disease is present, Gestation is to be employed - Many Women observe, that when Travelling the menstrual flux is much diminished - I believe that in most Cases, and upon the same principles as in Hemoptysis, a moderate and long continued Exercise, and therefore Sailing, may be very useful - However, it is ambiguous whether, when the Evacuation is present, Gestation does not sometimes encrease it; and it is always more certain and safe in the Intervals.

When Laxity is apprehended, means of restoring the Tone are to be employed, such as the use of Cold Air. And accordingly we find that Cold Bathing is sometimes serviceable - But I think the Cold Bath ambiguous, when the Menorrhagia is attended with encreased Impetus; and is chiefly advantageous when a general atonia is present - Bleeding is a good Remidy in active Hemorrhagies, but less so here, because of the separation of the Uterus from the rest of the sys

system: and I am persuaded it could never have been pursued to twelve considerable bleedings, as Astruc mentions in such Cases, had it not been for its little Influence on the Uterus. When there is a general Laxity, and especially of the Extreme vessels of the Uterus, it may be hurtful by encreasing it; and I have seen many bad effects from it.

As for Medicines, Astringents, such as Alum, may be employed, when the flux is present and excessive. If used as Preventives, whether as Astringents or Sedatives, they may be pushed too far, as they operate more on the rest of the System than on the Uterus itself. In the 3d. 4th and 7th Causes, astringents are proper; but Tonics are more useful, the chief of which are Chalybeates and the Peruvian Bark. I imagine that in Menorrhagia there is no more effectual Remedy than Chalybeates. As such, we know the advantages of their being continued, in small quantities, for a long time; but in the form of Water they are particularly advantageous. Water supports the serous Excretions, on which the balance of the System so much depends, & prevent Plethora; and as it is readily disposed to pass off by the Kidneys and Surface, it is not liable to be dangerous by encreasing our Fluids. Cold water a little acidulated, together with the Exercise and cold air that attend the use of Mineral waters, will assist the determination to the Surface. This is enough on Menorrhagia.

I have given you in the Synonyms, the Leucor-rhœa, or Fluor Albus, a discharge from the Vagina which is not bloody, but of different kinds, according to the sourses from which it proceeds. But independant of its sourse, it may be merely a mucous discharge, as in the virulent Gonorrhoea: Or it may proceed from Tumors, Ulcerations, &c. forming and furnishing the matter in the Vagina. From the Uterus, it may be mucus, serum, or matter from Ulcerous affections of the Uterus: and thus it is difficult to give a Diagnosis of all the different species of Fluor Albus. That in which we are here concerned is chiefly a serous or puriform Discharge, attending the menstrual Evacuation from the Uterus. Sometimes it is pure water, sometimes it is attended with fœtor, and sometimes purulent, or even true Pus. If the serous Effusion be of a nature fit to admit of suppuration, and therefore form its degree of stagnation, it may put on many different forms. It may be distinguished,

1. Because it happens in persons liable to copious menstruation, which leaves a Laxity in the Vessels.

2. It happens chiefly in the end and beginning of Menstruation; and it goes on in such a manner as to be entirely substituted for it; but is more permanent. If the Vessels have become so lax, as to admit constantly of the Evacuation of Serum, it anticipates and prevents that of Red Blood, by preventing the accumulation necessary to allow the passage of red glo

Globules.

3. It commonly arises without symptoms of previous Topical affection, whereas few Cases proceeding from topical affection will appear without such Complaints, (or symptoms) - But it is attended with the same symptoms that attend Menstruation. These reasons give a presumption that the fluor albus proceeds from the same source as the Menstruation -

Lastly, it is attended with Affections of the Stomach, which are not to be expected in topical affections - By these marks, chiefly when taken together, we seldom miss of distinguishing Fluor albus.

That Species of Leucorrhoea we distinguish, arises from the same vessels as the proper Menorrhagia, of which it truly a species, differing only in the degree of affection. Besides those mentioned above, there are two other heads of Evacuations.

1. Encrease of Mucus from the Glands of the Vagina and Uterus.
2. Evacuations from Ulcerations.

But they are not well described, and the history we have of them is so bad that we cannot give a proper diagnostic of them. There is one Mr Rollin, who has given a Traité des Fleurs Blanches, in which he distinguishes with subtility the different Species or varieties of proper Leucorrhoea: But

But I cannot follow him. He imputes this disease to the state of the fluids, making of it a Cacochymia; and other wise to a change of balance depending on affections of the Organs connected with the Uterus. The misfortune is, that besides I cannot follow him, I cannot trust to any fact in his book. He supposes the Lacteal Vessels connected with the Uterus, and that the Chyle is often discharged by the Vagina in Fluor Albus. He speaks of a Lady who had a Fluor albus of Chocolate, chiefly when mixed with milk, an hour or two after she had drunk it. I confess it is difficult to believe these facts.

To return. I say that Fluor Albus depends on the Laxity of the Vessels of the Uterus, which give the Menstrual discharge. Whatever increases the Flow of the Menses may give that Laxity. From this view of the Subject it appears that it is difficult to Cure, because it is difficult to restore the Tone of a part out of our reach. With regard to External Applications, though Fundamentally the Cure is the Cure is the same as in Menorrhagia, consisting.

1. In avoiding all Excesses which may increase the Impetus and the Plethora.
2. In avoiding all Irritations of the Uterus.
3. In restoring the Tone of the Vessels by Tonics, Cold Baths, &c.

I next proceed to the second subdivision of

Menorrhagia — Abortus. The Theory of Pregnancy is very difficult. and I must begin by declaring, that the Doctrine of Abortus, in all its circumstances, cannot be made very clear. But we can at least go some length here with

with regard to the practice - The continuance of Pregnancy to its due period, depends on the continuance of the Anastomosis of the uterus with the Placenta - We must believe that the adhereance depends on the Tone of their vessels - and the Separation may depend either on encreased Impetus, or upon the weakness and Laxity of the Extreme vessels - therefore the Causes of abortus are,

1. Those of encreased Impetus, such as external violence, agitation, posture, &c.

2. Those of weakness and atony, induced on the Extreme Vessels.

This reduces the Theory of abortus to the same as Menorrhagia. The difficulty is to distinguish these two sets of Causes.

Universally in pregnancy, and much more on the appearance of Symptoms threatening abortus, a Low Diet, and every means of diminishing the encreased Impetus are necessary - Nature points out this by giving to Pregnant Women an unusual appetite for Vegetables; and Nausea and Vomiting &c. on too rich a diet - all Violent motions must likewise be avoided - I have know abortus prevented by keeping the body continually at rest - an Erect posture alone may induce it in that state - at the same time, if there be not yet symptoms threatening abortus, the support of Pregnancy is frequent gestation continued for the whole time of it - after what I have said, the necessity of avoiding all Spiritous Liquors must appear - If there are any Symptoms of encreased Impetus, of Diathesis Phlogistica, encreased determination to the uterus, or congestion, Bleeding is necessary. But when congestion does not appear, when Flaccidity and previous Fluor Albus, or Menorrhagia discover a Laxity of the System, I have seen Bloodletting

induce

induce abortus, which it was intended to prevent. Most other Re-midies are common to all Cases — Cold Bathing I have sometimes seen employed, though seldom — In Cases of Laxity, I should think it useful, but improper in those of encreased Impetus — You will find in practice, that this distinction of Causes is the chief Circumstance of it. I say nothing concerning Astringents — They may be necessary when the Symptoms are present, but generally they will be of little service as a prophylaxis, except in Cases of great Laxity — We have not yet ventured on the use of Chalybeates in such Cases — The Bark I have known employed with good and bad Effects — I come now to con-sider the contrary disease

Amenorrhoea.

Char. Mensium suppressio.

This is to be considered a disease, except in cases of Conception. Savauges has refused it a place in his System, be-cause it is a negative disease — But it is impossible to build a Nosology, without admitting negative diseases; and Savauges himself, among his Debilitates, has many such — other Syste-matics have admitted this: but I was at a loss where to place it — at Last I have placed it among the Locales; but it is a Localis which must enter our Course: and this is the pro-per place for its consideration — It is of two kinds.

1. Emansio mensium when the Menses do not flow at the same period —
2. Suppressio, when after they have begun to flow they are sup-pressed — It must depend either on the want of uterine ple-thora

plethora, or want of Tone in the Uterine Vessels, or Resistance in the extreme Vessels - That Resistance may be occasioned,

a. By viscid fluids -

b. By Constriction of the Vessels -

The first is not impossible, but quite hypothetical. I have mentioned the difficulties of admitting such a Lentor in other Cases - Cold and Fear generally bring on the second cause: and it is this last set of Causes which takes place in Suppressio - We begin by considering more particularly the Emansio.

This is a very difficult subject - The time of Menstruation is very different in different Women; which may depend either on the state of the Uterus, resisting more to its Evolution; or upon the slow growth of the whole System. The last case is not a disease - and even when it depends on the slow Evolution of the Uterus, often it is not a disease, but often also it may bring on fatal Circumstances - Morgagni gives a Case of this kind, where on dissection he found no other cause of Death than a very small uterus - It is in such Cases that we may do much mischief by Remedies - It is difficult to know when the Emansio depends on the defect of Uterine plethora, or on the defect of Tone in the Vessels - We suspect the last chiefly when it is accompanied with general flaccidity and Chlorosis - This disease I have put among the adynamiæ; and ~~be~~ from its Character, it appears to consist in a general Flaccidity and loss of Tone - But it is very doubtful whether Chlorosis is to be considered here as a Cause or an Effect - I think it is an Effect, as we see it happens only at particular periods and in particular persons - The State of the Genitals has great influence in both sexes - The filling

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of the Vesiculæ seminales makes the beard grow and changes the Voice - There is no doubt but the state of the Ovarium also affects the whole System - We may suppose that a certain State of the Ovarium, fitted for generation, gives, at a certain period, a Stimulus to the whole system; the absence of which induces a Chlorosis, a general Flaccidity of the whole system, and Emansio mensium - In such a case we cannot apply remedies to the Cause itself, either because we do not know it, or cannot obviate it - It must be by restoring the Tone of the System, determining the Impetus to the Uterus, and exciting the action of that organ, that we must treat this disease - Chalybeates, the Bark, Cold Bathing and Tonics in general, will answer the first Indication - The Impetus is determined to the Uterus,

1. By Exercise, which acts also as a Tonic.
2. More particularly by Frictions.
3. By Warm Applications to the lower Extremities.

Other Remedies have been contrived under the name of Emmenagogues, but I know none that are effectual - Aloetics, by stimulating the organs contiguous to the Uterus, have sometimes their effect, but accidentally. The same may be said of those Gums which are ranked among Emmenagogues; but no observation points out their particularly exciting the Uterus - Fœtid Gums and plants, may, as antispasmodics, have some effect in Cases of Constriction. But in Emansio from Laxity, antispasmodics have no place - In general in Emansio mensium it is very important to distinguish between cases of

of Inflamatory Spasm and Cause of Flaccidity or Loss of Tone. But this applies also to Suppression. With regard to this I observe, that the state of the Evacuation of the Uterus is not much influenced by that of the Sanguiferous System in general - But more frequently Suppression depends on Constriction of the Extreme Vessels, by Causes which operate on the nervous System, such as Cold, Fear, Passions, all Causes of sudden debility and of Constriction of the extreme Vessels - It is probable that the Extremities are every where a distinct System -

I was treating of Amenorrhagia, and did not de-liver the Doctrine to my satisfaction - But it is suffici-ently simple and easy - Menstruation depends on the dilatation of the Vessels of the Uterus, naturally constricted and resisting that dilatation - It depends therefore on encreased Impetus; and Amenorrhagia consequently depends either on want of encreased Impetus, or on want of Tone and resistance in the Vessels - The encreased Impetus depends on accumulation of blood or uterine Plethora, either from natural Conformation or from some other particular Circumstance - The Resistance of the vessels depends either on a Lentor of the fluids (which Cause I reject as improbable), or on encreased Constriction of the Vessels - The want of Tone in the System in general, will commonly be the Cause of Emansio Mensium, or the Menses not flowing at the usual period for the first time - Suppressio, when the Evacuation is stopt, will depend upon a particular constriction of the Uterine Vessels.

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With regard to the Cure of Emansio, it depends on reestablishing the Impetus and of the Tone of the gene-ral system — With regard to the Suppressio, after the Eva-cuation is once established, we must observe that the System of the Uterus is distinct from the general one; and therefore suppression will rather arise from Constriction of the Vessels of the Uterus, and accordingly be brought on by fear, Cold, Passions, and other Causes of Constriction — I do not call it spasmodic, for good reasons. You may ask if this Constriction be general? I think it is probably on the Ex-tremities only, because an accumulation commonly appears, though there be no Evacuation — But at the same time, I do not say that the system has no share in the Suppression. Some Women have their Menses in summer only — This may be ascribed to a want of vigour necessary in Winter — In other Instances we see suppression in Con-sequence of a weak flaccid habit, and in Consequence of many diseases producing debility, a Phthisis — As for the Cure, if the disease depends on a defect of general Tone, it requires the same Remedies as Emansio, viz, to increase and determine the Impetus to the Uterus, and to rees-tablish the general Tone of the System — One Remedy I had forgot, I would speak of the Chief Remedy, Venery, as being not in our choice — As for other Irritations, such as those determining chiefly to the Intestines or descend-ing Aorta, we have spoke of them. Pessaries and Injections in the Vagina have been proposed, but

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from several circumstances in our manners, they cannot take place in this Country - I have had no Experience of these, and have not urged the practice, because if too irritating, they might hurt the Vagina, which is still at a distance from the Uterus. But good practitioners have spoke of Injections with praise - Astruc speaks of Stimulant Injections for Suppression and Emansion - What Fumigations of Volatile Alkali may do, I cannot say - Two or three trials I made of them had no effect. But I have not had occasion to remark the effect of Injections - But supposing the Suppression depends on the Constriction of the extreme vessels, as often it does, we have few means of taking of this Constriction, being spasmodic; and we trust so little to them, that our practice turns entirely on encreasing the Impetus - Our Emmenagogues act more as stimulants than as Antispasmodics; and Tonics are rather useful as encreasing the Impetus - As for the time of Exhibiting these remedies; when Tonics are to be used, they may be given at any time, and continued also for some time - But when we use more particular Stimulants to determine to the Uterus, whether Pediluvia, Purgatives, &c. they are all limited to the Time of their operation - It would be of no use to Stimulate when Nature does not co-operate with us in producing Uterine Plethora; and it is only with the Assistance of an accumulation in the Vessels of the Uterus that we can expect a good effect from them: and without this it is to no purpose to harrass women with Emmenagogues: As for Example, in Winter-Suppressions depending on Cold of the

Season

season - But such is the power of habit, you may easily guess the time of natural Plethora, which is the only one at which Remedies must be attempted - As for the Compression of the Iliac Artery, I suspect there is some fallacy in it, because for once or twice I have seen good Effects from it, it has been useless in ten or a dozen others - It is doubtful how far it would extend - I cannot say however, that I have seen bad effects from it by determining to the head, Lungs, or other Important parts - But if employed, it should be at the time of the usual period only, as the continuation of would be troublesome and uneasy - There is but one more nicety to be considered in practice - The Constriction of the Extreme Vessels of the Uterus (simply so called, when not connected with the rest of the system), is most commonly of the Inflamatory kind, which Inflamation is sometimes communicated to the rest of the system, and produces more or less of Diathesis Phlogistica; and hence Hæmorrhagies from the part - In such Cases bleeding is the only Remedy to relieve the Spasm on the Extreme vessels - Stimulants and Tonics would be useless - But when the Constriction is entirely topical, Tonics and Stimulants are useful to encrease the impetus, and thus to resolve the spasm - This is the manner of determining a question which arose concerning Bleeding in Cases of Suppression - Physicians considering bleeding as a means of derivation, ordered in all suppressions a bleeding at the foot - But the Doctrine of Derivation from Bleeding was very long ago discovered to be false, and is now entirely exploded - Whenever Bleeding is necessary, it is

is more useful by Venesection at the Arm.

Gen. XXXVI. Hæmorrhois.

Char. "Capitis gravitas vel dolor; vertigo; lumborum dolor;
"dolor ani; circa anum tubercula livida dolentia e quibus ple
"-rumque profluit sanguis; qui aliquando etiam, nullo tumore
"apparente, ex ano stillat."

Though this is placed before Menorrhagia in the Synopsis, I have reserved its consideration for this place, because it is a venous Hæmorrhagy - Observe that in Hæ-morrhois the blood is not pushed out as in Menorrhagia, from vessels formed by Nature for accumulation and dilatation; and there is not here that circumstance occur-ring from Hæmorrhagies of the Nose and Lungs, that the ruptured Vessels are on the surface: whence the Hæ-morrhagy of these parts is attended with evacuation of the Blood - Here the accumulation is commonly in the Cellular Texture, in little Tumors occurring in the Anus, which, when encreased to a certain size, break and pour out some blood, often disappearing afterwards - From the appearance of these Tumors, lax, flaccid, and of the colour of Veins, it has been supposed that they were only varices of the Veins dilated - This opinion, though still supported by Haller, is liable to difficulties.

1. The Veins seem too small to admit such Tumors and swelling -

2. These Tumors are not lax and flaccid, as has been said, but, as far as I could observe, pretty hard and firm: and it could not be so, if the blood were not distributed in different Cells - Therefore I have no doubt these Tumors are Effusions into the cellular Substance; whether from rupture of the Veins or Arterial Anastomoses is uncertain - It is difficult to say what change in the ballance of the System could determine to Congestions in the Haemorrhoidal Arteries - There is here no habitual plethora from Infancy and Puberty, which lays the foundation of Epistaxis - There is not that particular connexion with the System at the time of Acme, which accounts for Haemoptysis; nor that particular Congestion or Plethora, which accounts for Menorrhagia - Therefore very probably it is of a different kind: as besides it does not occur when arterial Plethora, but when venous plethora takes place, or at that time of Life when the balance is thrown upon the Veins - It is true that Exceptions may be brought against these; but only in cases of Compression in the region of the rectum: - and from these another Argument arises; for how could these compressions carry more blood into the arteries -

The return of Venous blood being stopt, sufficiently accounts for the Tumor: Whence we conclude that there is here a venous congestion - But the regurgitation of that blood is attended with many difficulties - a Compression on a large venous Trunk, it is true, may cause such a

a considerable accumulation of the blood and induce an Extravasation — But upon a small Branch only, the Compress -sion will cause the blood to escape by Anastomoses, or from the Arteries into the Exhalents — Admit only the Sup -position that the stagnation of the venous blood resists the Entrance of the blood from the Arteries into the Veins: a Con -gestion in the extreme arteries must ensue, and therefore in the exhalents, to which the Blood passes directly from the Arteries. If we consider that such Congestions often prove a stimulus to the whole System, we may understand how this induces an active Hemorrhagy — That the Effusion is chiefly from the Arteries, I conclude, from the general Tension concurring at the same time, sense of weight, Vertigo, Dyspnoea, and asthma in asthmatic people, nay often Epistaxis, vomiting and spitting of blood, often in Consequence of stopt Hemorrhoids — All these Symptoms certainly prove arterial Congestion — all the Symptoms of active Hemorrhagies occur here; cold fits, &c. Fever, and all Symptoms of Inflamation — Storck has given an account of a Febris Hemorrhoidalis; per -haps pushed too far: De Haen treats it as ill founded, but I have often seen feverish fits preceding hemorrhoidal Evacuations — If often they are perceived, it proves only that, as Inflamations, the affection may be topical — Hence we conclude, that the Congestion is at first probably venous, tho the hemorrhagy be active and arterial — We must then trace the Causes of this Venous Congestion, determined chiefly where the Circulation is slow, as in the system of the Vena Portarum: Whence the Extremities of the Veins offer a resist -ance to the arterial blood — If the Exhalent Vessels yield,

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an Ascites ensues; if not, we have a congestion of red blood in the venous system, and, in consequence, symptoms of such Congestion through the whole alimentary canal, and even sometimes Hæmorrhagy Whence the Melena of Savauges - This disease is explained with difficulty, unless we suppose a venous Congestion near the surface of the alimentary Canal, and chiefly near the Rectum, because of its distance from the Trunk, and because of its situation in a Lax cellular Texture, admitting of Extravasation

In offering a new Doctrine, it is commonly necessary to begin in an analetical way, to give the proof for our Conclusions; but sometimes it breaks our subject, on which account the synthetic is sometimes preferable; which we shall therefore follow in treating of Hæmorrhois - This is my Doctrine - During the first part of Life, the arterial system is Lax, yielding to after Evolutions - But it becomes always more and more rigid; and as the Veins follow a contrary Course, the accumulation must first be made in the Arteries, and then, after 35 years at a medium, chiefly in the venous system - While this venous plethora prevails, it will be felt chiefly in the system of the venous Portarum - It is observed that Sedentary people have the Spleen and Liver much encreased - And no doubt this venous plethora occurs in different Chronic diseases - One effect of it is, to encrease the resistance towards the Extremities of the Veins tending to the Liver and Spleen - But I do not suppose this ever takes place so as to occasion a rupture or Regurgitation from the Exhalents - For the reasons given yesterday, I think it probable, that more or less accumulation is formed in the Extremities of the arteries, and may rise to a degree to give an Irritation, producing Horror and Constriction, and in con-

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Consequence an eruption of blood from the Extremities of the arteries - But these arteries do not open into the Cavities - They are not exposed to the surface of any cavity, or to the surface on the external parts, so as to admit of rupture - Hence the effusion must take place in that quantity of Lax cellular substance that is formed about the anus - That Effusion produces Tumors, which do not so readily form on the internal surface of the Rectum, because it is guarded by the Constriction of the Sphinc-ter; but they are found chiefly about the anus - The Stahlians suppose the internal Hæmorrhoids much more common than external ones - These occur sometimes indeed, but from my ob-servation, the external always appear before, and often without the internal - Observe that in this Explanation I have entirely considered the Hæmorrhoidal flux as a disease of the System, de-pending on general Plethora - This is by no means the case, nor a frequent Cause - The Hæmorrhoidal Swellings arise often from occasional and topical Causes, no way depending on a ge-neral plethora - The Hæmorrhoidal Veins are very liable to a Compression, chiefly by hardened Fæces - The whole inter-nal surface of the rectum is guarded against this effect by its strong muscular Fibres - Hardened Fæces often compress the lower part of the intestines, so as to produce a Prolapsus Ani - They must therefore frequently press upon the Hæmorr-hoidal Veins, which may produce not only accumulation, but even regurgitation: not however in the first instance, but upon repetition it may certainly do this - We know that this happens in some other Instances of Compression on the Rec-tum - Often, e.g. from a scirrhous bladder, from a stone in its neck, from gravid Uterus, &c. If we consider that the Hæmorrhoids often happen early in Life, we must seek for some

some topical Causes of them - They often take place in a morbid degree many years before 35. and before the venous plethora is to be suspected or apprehended - But I do not know one Instance of Early Hæmorrhoids where I could not trace it to such Causes of Compression - It rarely occurs in persons that are not of a Costive habit - In short, I think it depends much less frequently on plethora than the Stahlians imagine - They say that Hæmorrhois happens more in men than in Women - I appeal for this to such of you as have had Experience in that way, but I know, that in this country, at least, there are two or three Hæmorrhoidal Women for one man - In them it cannot be imputed to plethora, except when the balance is well establish'd, but not more early in Life - and we know very well that women at that time are liable to a costive habit, and extremely liable to neglect it; and on this account they are liable to a Hæmorrhois. Besides they are liable to the Compression of the gravid Uterus, and I have known many instances of this disease in consequence of pregnancy (though they never had occurred before) from compression on the veins - We have have endeavoured to explain the different Cases of hæmorrhoidal flux, as depending on general plethora or topical Causes - When once become frequent, like other Hæmorrhagies, this flow is liable to become habitual, and perhaps, as the Stahlians pretend, periodical - However, unless they occur in parts of an apparent particular Conformation, as the Uterus, Hæmorrhagies are seldom periodical - This may sometimes occur in Hæmorrhois, but o 2. or 300 Cases I know of it, scarcely three are periodical, and even them not exactly so; But it is frequently Habitual.

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I proceed to the Cure. But first, is a Cure to be attempted? With this Hæmorrhagy, that Question properly oc-curs. The Stahlians push their System here to excess, proceed-ing always on the supposition of a general Plethora, they oppose all means of suppressing or even moderating Hæmorrhoids, except when in an immense degree - In all Schools of Physic it is a-greed, that we must be cautious here in our attempts of Cure, when the flow is become habitual. De Haen, who had studied in the School of Boerhaave, when he went to practice at Vienna, found the Physicians there full of the Stahlian system, with had influence on their Practice - On this account he pub-lished a Thesis "De Hæmorrhoidibus", with more Judgement than any Writer I know on the subject - When they arise from general plethora, we are certainly to attempt a Cure at their first appearance - But when the flow is become habitual, the suppressing it is very hazardous - But at the same time it is to be desired that it could be removed by taking away the plethora and Occasional Causes, either in the whole or in particular Vessels - The danger and dif-ficulty will encrease with the duration of the disease - But even then there is always room for some practice, either to cure or palliate - We must be caution on its first appear-ance to prevent its return; and when it is habitual we must lessen the topical affection, and if possible remove it. In general, though the disease becomes sometimes salutary, yet it is a precarious, disagreeable, and inconvenient way of preserving health; nay, upon frequent Repetition it may prove pernicious - A Cure is therefore to be attempted: And it turns upon guarding against or taking away the plethora, by

by the use of a more Spare and a more Perspirable Diet; and by Obviating Congestions in the Vena Portarum: This is to be done by avoiding Plethora, chiefly by Exercise. A Sedentary life always produces these Congestions in the system of the Vena Portarum during the decline of Life. Well-fed Animals in the decline of Life have been found, by Bryan Robinson, to have the Liver and Spleen much enlarged - When Hæmorrhoids have already taken place, bodily Exercise will encrease and aggravate them; but in the Inter-vals, it is the only fundamental Remedy - These measures are to be pursued at any time

Further, the Cure depends on avoiding all topical Irritations, chiefly a costive habit - It may be supposed from our Explanation, that the Hæmorrhois, when it occurs, is pretty constant - However, it commonly happens on stool only; I have known instances indeed of an almost perpetual flux pro-ducing Tenesmus and desidendi cupido - From this it ap-pears of importance to render this evacuation as easy as possi-ble - A Laxity is to be produced by a Low Diet, as purga-tive medicines irritate too much - The effect of Aliments is not steady, even in the same person - Vegetables sometimes induce costiness, but much oftener Laxity - A Gentleman who had long had this disease took a Vegetable diet for more than two years with this effect; and his belly, before unequal, is now entirely equal, lax, and never Costive - I have seen many such instances: However this has often disappointed me - When this cannot be done by Diet, we must have recourse to Re-medies - Every one knows that purgatives are in danger

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of irritating by their acrimony, which is not assimilated in the Alimentary Canal, and which is chiefly felt in the end of the Rectum. This is particularly the Case of Aloes, Fœtid Gums, &c. It is almost impossible to dose these acrid Pur-gatives so that they may produce only one stool aday - Very often they produce many, and leave the Intestines in a state of Constriction and Costiveness - Persons of Costive habits have sometimes the bad Custom of Chewing Rhubarb, a re-medy for the day, but certainly bringing back the disease on the next day - On this account we are obliged to take the milder Laxatives, as Sulphur, which will produce one stool aday, and no more - I know hæmorrhoidal persons kept for many years from this disease by the use of this only - In many persons, however, it does not succeed - And the next Lax-ative is Neutral Salt - This is liable to the objections made against Purgatives in general - Sal. Glauberi to ℥i or ℥ij aday, will sometimes answer very well - I knew an hæmorr-hoidal Physician who used it with advantage for many years. Another Eccoprotic is bland Oil in larger quantity. I know a person liable to Colic and Hæmorrhoids, whose Remedy is ℥iv. of Oil, taken in a short time - And the more Experi-ence I have of the Oleum Ricini, the more I am per-suaded of its good effects - a Spoonful, or half asmuch, every day will answer very well - Lastly the use of fruits, as Oranges, Apples, Prunes, &c. will often answer the purpose; but in many Constitutions they are to be rejected, chiefly where the

the hæmorrhoidal flux is become habitual, in which case it acquires a connexion with the System analogous to what occurs in Gouty persons - Whatever affects the Tone of the sto-mach, is frequently a cause of Hæmorrhois - Others are after by Acids of all kinds, and by these fruits in particular. Claret will produce the same effect - I should, if I had time, take notice of the Accidents that are to be avoided in Hæ-morrhois, but they are treated of in every Book

Profluvia.

Char. " Pyrexia cum excretione aucta, naturaliter non san-"guinea.

Every one of the Systematics has a Class ana-logous to this. It is the Fluxus in Sauvages, Morbi Eva-cuatorii of Linneus, and Profluvia of Vogel, which however comprehend Hæmorrhois - The three Systematics before me have founded their Character on the single Circumstance of general Evacuation, which alone cannot be sufficient to form a natural Class. The fluxus sanguinei and serosi are comprehended by them in one Class - Again under the sanguinei, active and passive Hæmorrhagies are comprehended: And among the Serous, they make no difference between the febrile and spasmodic Proflu-via - again, they join diseases with and without morbific matter, symptomatic and Idiopathic - In a Criticism of No-soloy, I would tell you that you have here a good opportu-nity, which you should take to observe how these Orders and

Genera

genera admit of an useful separation — Of a few of them, I have formed an Order of Profluvia febrilia et activa, i.e always joined with fever, to distinguish them from the Spasmodic and passive Profluvia — As for the others, I don't know well how to dispose of them — But in the Synopsis you see how I have done it — You may perhaps imagine that I should have joined the Profluvia activa, as Vogel, with Hæmorrhagies. But,

1. These are sanguineous, the other not naturally so.
2. The Congestion constantly supposed in Hæmorrhagies does not occur in Profluvia. There is a change indeed in the determination of the fluids, but none in the balance of the system.
3. A morbific matter never occurs in hæmorrhagic Congestions, but almost always in Profluvia —

As for the Genera, I have put only two, because the others are perhaps of less Consequence, or because rather there is none I can clearly mark and understand, except Catarrhus and Dysenteria.

Catarrhus.

This is plainly an increased secretion of Mucus, which may take place in many different parts of the Body, but confined here to the Nose, fauces, and Bronchiæ — But to comprehend under it gravido and dry cough, I have added.

"Sal.

"Saltem molimena hujus Excretionis." The different Parts it affects has occasioned a difference of Names; but by this La-vauges has introduced much Confusion, and his genera are not well explained - But we have Leisure to explain the nature of the disease only -

We say there is here an encrease of Mucus, with Pyrexia, very generally evident, and supposed in other Cases. Not only pyrexia, but also diathesis Phlogistica occur here. There is all the appearance of Phlegmasia, and the blood is often covered with Inflamatory Crusts; therefore you'll not be much mistaken in taking it a true Inflamation - But farther, there is here reason to suppose a morbific matter introduced - We know this by the disease being so frequently Epidemic - During the winter season, Catarrh is frequent in all cold Countries; but it sometimes Epidemic. In the begin-ning of this Century those Epidemics were called Influenzes. De Taranta mentions one at Montpelier in 1397. Morgagni mentions an Italian Historian who mentions one at the same time - I could give twelve instaces of them in my own time (and we know that there were Diseases before Physicians) The first I saw was in the year 1733 - We know that it came from Asia to Africa, and after passing over all Europe, went to North America - There is no doubt then that Catarrh is often attended with a morbific matter. This at first may operate, as others, by producing fever, independantly of any particular determination; and then be determined to the mucous glands, as mercury to the salivary, produce Inflamation -

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I presume that when arising in the human body, it operates in the same way, from this, that in other Contagions we can often trace the Obstruction of Perspiration, of which the matter, as we have said, is particularly determined to the mucous glands. From this last consideration, of its arising from Obstructed Perspiration often, it may be sporadic - But it is possible also that it be a contagion, but so weak as not to operate without the Concurrence of Cold - Therefore when Catarrh come frequently, and spreads through a family, a Contagion is to be supposed - It is probable that ~~the~~ perspirable matter is its proper Vehicle, and when this is not obstructed, it does not enter the body - Hence it occurs chiefly in cold and winter, and is particularly determined to the Bronchia. When the disease is contagious, it is the mildest we know, being neither violent nor durable - Its little duration implies that it is soon washed off from the body, and a fortiori that whose vehicle is the Perspirable matter has an advantage of being soon discharged - Perhaps also this comes from its soon running its Course in its assimilating power - Of that assimilating power of Contagions, we have many Examples, but it is soon performed, and seems to be but once possible in our fluids, so that often Contagions return but once; but this may be owing to our Nerves being liable to be but once affected by it - In most cases even the Epidemic Catarrh is mild, except when there are Tubercles in the Lungs or in Old persons, in which it may prove dangerous,

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bring on Peripneumonia notha, or Catarrhus suffocativus - In these it induces a sudden afflux of fluids to the Lungs, or, as Morgagni thinks, palsy of the Lungs, which renders even a moderate afflux suffocating

Cure. The Indications are,

1. To moderate and take off the Diathesis Phlogistica by Bloodletting, proportioned to the Urgency of the Symptoms and the Circumstances of the Patient - In young people it is more safe, in old ones more dangerous - In speaking of Inflamations I have touched this subject, and there quoted Morgagni.

2. To take off the Diathesis Phlogistica as particularly affecting the Lungs; and at the same time, any determination there; which is to be done chiefly by Blisters, most to be depended on in Elderly persons: and also,

3. To restore the perspiration, which may be done by Emetics and Sudorifics. But Emetics are also useful in old persons in Cases of unusual afflux of Mucus, being the best Expectorants - As for Sudorifics, I have told you the caution they require; but they are no where more indicated than here, and accordingly, when properly managed, we have many instances of their good Effects - Warm Water with Honey or Sugar on going to bed, may be a quick method of Curing the disease - But it is of consequence afterwards to avoid Cold, which aggravates and renews the disease; though too much external heat is

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to be avoided - Under this Phlogistic Diathesis, men acquire a great sensibility to cold, and when the Catarrh lasts long, we always suspect a repetition rather than a continuation of the disease - I must refer you to the Practice of Morgagni on himself, a mild but judicious practice - He gives an account of the Death and Dissection of the Archbishop of Padua, who died of the Epidemic Catarrh in Italy in 1730. and then gives an account of his Practice and his remarks, which you may have access to in his book, - which are very judicious - I am persuaded the mischief done by sweating, comes from a want of keeping the body in a due tepor for some time after.

Dysenteria.

The first thing necessary here, is a distinction of this from Diarrhaea, a distinction which has much puzzled Pathologists, Systematics, and Physicians - They have distinguished them by the degree; but magis vel minus non variat Speciem - Others have taken bloody stools for the Character of Dysenteria - But all agree that Dysenteries have often existed without bloody stools - Roederer, Sydenham and Willis have given many instances of this - In short, after a due consideration of that subject, specially after the Excursions of Sir John Pringle, there is no doubt but Contagion

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is to be admitted into the Character of this disease - The Character we have given must be taken all togather - To understand this disease, we must trace it to its source -

It sometimes appears in winter, but rather in the beginning of Autumn or end of Summer, at the time of bilious Constitution - It also occurs with marsh fever - You may consult Pringle, Cleghorn, Roederer, who will satisfy you about this, and that this disease is much connected with those fevers - But certain the operation is different - Tertians are attended with no Dysenteric flux, and therefore there must be some Circumstance determing to this, probably it is a particular part of the bile concurring with the contagion. This explains why dysentery happens at a particular season, and why it is determined to the Intestines.

I have entered on Dysenteria, a disease which has sometimes destroyed our Cities and Fields, but more commonly in later times our Fleets and Armies - You have the History complete in Sydenham and Pringle; and I believe the practice is good; but as no Practice is on a good footing till its Theory is understood, we must consider its nature.

Marsh Effluvia often produce fever without producing Dysentery; and from this, when Dysenteries appear also, we may suppose two Causes for these two diseases con-

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-Concurring, but not the same - Farther, people living in Warmer Climates, may avoid fevers by avoiding Marshy Effluvia; but this is not the Case with Dysentery, which warmth alone may always induce in the driest Countries and seasons, as appears in the histories of our Armies - If Dysenteries and fevers arise from the same effluvia, it is at least under different modifications - The bile affected by heat produces Colics; and Dysenteries appear after a warm dry summer - There -fore we may presume that the disease depends upon an af -fection of the Bile, which accounts for its determination to the Intestines - The heat and dryness of the season seldom produces dysenteria, unless by the application of cold - Dy -senteria comes in warm Seasons, but only after rain, moisture, and cold; and thus it was that all our Soldiers and Seamen took it - But how do these remote Causes operate in producing the Proximate Cause, or the Disease itself? Dysentery begins almost always with fever, Dr Akenside denies this; but all other Physicians agree in it. And when we admit a Contagion, we have no diffi -culty in accounting for it - But after all, the chief Cir -cumstance is the determination to the Intestines; and when this appears, the fever or general reaction of the System disappears, and turns itself chiefly to the part. Yet the skin is dry, sweat is excited with difficulty, and the disease is re -lieved by every means of supporting the Perspiration, warmth, &c.

The operation of the morbific matter in the Intestinal Canal, is however the chief object of our enquiry, and is not well understood - The most common Opinion, is that the acrid matter stimulates the intestines, and thus encreases the peristaltic motion and the secretion of the mucous glands: whence the encreased evacuation - This is simple enough; and when the disease first begins, may be so; but as it goes on the Evacuation becomes less and less copious, though frequent - This is universally true. The stools consist of a little mucus, sometimes bloody, and some-times mixt with a serum or watery fluid, but so small in quantity as to be produced by the glands of the Rectum. It is rare that any faeces appear, except when brought down by Purgatives, which produce stools shewing that the faeces are not liquified and broke down - Purgatives carry them down, and often in the shape of Extreme hard Scybala, which shews they been long retained in the Intestines: Hence we conclude that the encrease of Peristaltic motion does not extend to the Colon; but we suppose the lower part of this is under a Spasmodic constriction: and from this we explain the Retention of faeces - But does the morbific matter produce both this constriction and the encrease of peristaltic motion in the Rectum? As by removing this Constriction we remove the Tormina, mucous stools, &c. We

sup

suppose that the Morbific matter operates only by produc-ing constriction - The Colon is under a Stricture in dis-tinct places, which give the distinct appearance to the Sy-bala - With this Constriction, I suppose there is constantly an Effort to the Peristaltic motion, but tending only to increase the Spasm and pain - But though that in-crease of peristaltic motion is not sufficient to resolve the Spasm, yet it may be sufficient to propagate Oscil-lations to the Rectum; whence the Tenesmus and the emulging the mucous glands; and hence also you un-derstand how some blood may be squeezed out of the superficial vessels by these efforts - In different cases these different Circumstances are attended with more or less fever, according to the power of the Contagion, or as the marshy Effluvia tends more or less to give fever.

2. It is also attended with more or less Diathesis phlo-gistica, but no way essential to the disease.

3. With more less tendency to putrefaction: whence the Bile is more or less disposed to the putrefactive process. I take no notice of the late discovery of particular ruf-ties by dissections, as they are the Effects not the cause of the disease, supervening always in consequence of the Inflamatory state of the great Guts: the Putrefactive course is ready to occur there -

Cure

Cure. This turns intirely on obviating the Constriction of the Colon which occurs here, and is the Cause of the Efforts and Tenesmus - Purgatives and Opiates are the two Remedies to be depended on in that view. The use, nay the necessity of Purging, has been agreed on all hands - It was first supposed necessary to the evacuation of the morbific matter, but of late, since the Circumstance of hard contents has been attened to, the Evacuation of these has been supposed the way in which Purgatives operate - But it appears that they are fitted to obviate the Constriction only - I have already had occasion to say, that the Evacuation of morbific matter may be left to Nature, and is pretty well executed by her - Morbific matter, when it occurs, is chiefly to be attended to with regard to its effects on the solids; from whence it is not easily evacuated: and with a view to do this, Purgatives will be very precarious - As for the second end aspired to Purgatives, it is more directly to the purpose - But it would lead us to allow too long Intervals between the Purgatives - The third purpose, to obviate Constriction, is the best -

With

With regard to particulars, Senna and other dried Purgatives, I have often found useful - But they require to be repeated constantly, and therefore it is, I think, a great improvement in our practice to use mild Purgatives, such as Neutral Salts, Manna and Oil, which leave no astriction behind them - Dr Young, who wrote on Opium, and was a man of Practice and Judgement, says, that Dysenteries may be cured by constant Laxatives - The Tincture of Rhubarb has been employed for this purpose - No body has apprehended this better than a Late Author on Dysentery, Dr Zimmerman of Switzerland - He begins by Vomits in a large dose, to produce a large Evacuation: But though they will relieve the Symptoms, yet their effects are not durable - after that he gives ℥i or ℥ij of Cream of Tartar in Oi of barly water - The next morning he gives ℥ij of Tamarinds in Oi of water; and again the next day repeats the Tartar; and thus alternating Tartar with Tamarinds he has generally succeeded - Rhubarb did not succeed so well with him as these mild Laxatives - He constantly refers the disease to the bile; and has always in view the Evacuation of putrid Bile - But though Bile sometimes appears in the beginning, generally it does not, especially in the end - He observes that so long as the Te-

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Tenesmus remains, purging only will prove a Remedy.

He explains at first the absence of Faeces by the absence of mucus in the Rectum, which he sup-plies by a glister of ℥ß of Gum Arabic - Laudanum had no effect - so far for the use of Purgatives, or rather Laxatives of the mildest kind, which should be exhibited constantly, and for many days.

Opium is the other Remedy employed - As the Constriction is very likely Spasmodic, we sup-pose that Opium is the best Remedy to take it off - How-ever, Sir John Pringle has doubted of this - I believe that Sydenham has indeed cured Dysenteries by the use of opium alone; but is Opium a final Cure? The nature of the disease is such, that the Constriction brings on an Inflamatory state, and to prevent this Opium is necessary, to moderate the Constriction - It has been supposed here to Operate with danger, by its astringent Effects - It indeed stops the Evacuation, but this effect is temporary only and not lasting - But in the Course of the disease there is truely no Evacuation of morbific matter, and therefore we need not be anxious about stopping that Evacuation - Yet I imagine, that though Opium relieves the Constriction, it rather prevents the radical Cure of the disease, which is to be effected by re

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removing the contents; and therefore it may induce a return of the constriction - Opium must be employed to relieve the pains, but, except in slight Cases, I would not trust to it alone, but join to it the use of Purgatives - There is nobody more fond of the use of Opium in Dysentery than myself; but if I had been steady in the use of Purgatives, I imagine I should have found them alone as useful to cure and relieve the disease - So far for the fundamental Cure of Dysen-teria; but there are still some varieties which require various other Remedies -

Our Doctrine on Dysentery is new, but simple and obvious. It is in general, that this disease does not consist in encrease of Peristaltic motion, nor of Intes-tinal Excretion - Whatever may appear in the first days of the disease, as it subsists, it consists in a Con-striction of the Colon, by which the feculent contents remain there, and are not protruded downwards; and the same time the Constriction, in a manner I wont explain, excites an encreased Peristaltic motion of the Rectum:- whence the Tenesmus and excretion of a little bloody mucus. How the retention of the matter in the Colon produces the motion of the Rectum, we dont explain - But what we have said is sufficient to understand the most useful method of Cure, and to fix it on good Principles, though perhaps it adds no new Practice - I have delivered the Fundamental Cure of Dysentery, which turns upon the proper use of Purgatives and Opium - As to Opium,

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I said, it might be necessary to relieve pain and Spas-modic motions of the Intestines, but it is a precarious Re-medy; and if Purgatives be well understood and employed, Opium will become useless - When I say that Purgatives and Opium are the whole of the fundamental Cure, I allow there are varieties that may require other Re-medies -

1. It has been disputed whether Dysentery should not always be attempted at first by **Bleeding**? If there be any ap-pearance of Diathesis Phlogistica, it may be necessary - But nothing is more rare, chiefly in the beginning; and if it occurs afterwards, it may be considered as accidental, from topical Irritation - However in vigorous and Robust per-sons, the fever that attends dysentery, though not Infla-matory, may require bleeding, but with much Caution. - Commonly the fever disappears soon - and if it subsists, it is of the putrid kind, and therefore I think bleeding is seldom or never necessary.

2. The Dysentery is often attended with Vomiting and af-fections of the Stomach; and it seems that much Bile is thrown into the alimentary Canal - With regard to these, I think it universally proper to begin the Cure with **Emetics** - But I go further, and on my own Experience and that of others, and say the Dysentery may be cured by Emetics alone, but only when so managed as to have a Purgative Effect, and thus to answer the general plan

of

of obviating constriction - No doubt Ipecacuana has thus been useful, and more certainly Tartar Emetic, in very small doses - But Purgatives themselves are more certain, and Emetics are inconvenient from the constant sickness they induce - Dr Donald Monro observes that this was the reason his people absolutely refused to take their Medicines.

3. In other Cases, such relaxation and Atony are induced on the stomach, that frequently a troublesome Flatulency occurs - In this case alone Absorbents are to be employed, but with much Caution, as the disease has a septic tendency which they promote.

4. When on the contrary the Stomach shews a putrid Tendency, which is more commonly the Case, Acids are necessary; and there are many instances of Dysenteria being entirely cured by acids, as fresh Fruits and fossil Acids.

5. In supposing the introduction of a forreign matter, it is uncertain how long the acrimony will subsist; but from the symptoms we perceive that certainly there is an acrimony which is to be obviated by Demulcents, Mucilaginous and oily mixtures, chiefly the Last, such as Demulcents of Suet, Wax, &c. - These lubricate and sheathe the Intestines, and are commonly Eccoprotic. We see that much oil is Laxative; and there is not a more Convenient Laxative in Dysenteries than Oleum Ricini.

6. Quieting the violent pains in this disease is often

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necessary; but whenever the use of Opium, the most certain remedy for these pains, is doubtful, we may sub-stitute for it Fomentations on the Belly, or even Blisters

7. When the Putrid tendency appears, and chiefly prevail-ing, Acids and also the Bark are proper. How far the bark, as an antiseptic, may obviate putrescency in the Alimentary Canal, is uncertain; but the Bark is chiefly proper on two other suppositions.

α. When the disease subsists, and the putrescency induces debility in the whole System, and therefore disposes the topical affection more particularly to Gangrene.

B. When the Dysentery is either connected with a Tertian, or when the fever attending it is of a periodical Course, the Bark, or some analogous remedy, is useful - You may find this illus-trated in Cleghorn.

8. As for Astringents, which have thrown so many doubts and difficulties on the Practice, if the disease consists only in an encreased Excretion, astringents might be more early admitted than they are - But there is here an objection; and astringents without doubt are never proper in pure and simple Dysenteries - If they have been found useful, it has been only where the disease has subsisted so long as to destroy the Tone of the Alimentary canal, and thus induced Diarrhoea. I can however determine this only be the reports of others, not by my own Experience - And I have never seen Dysentery Cured by astringents - For further Information, read Sir John Pringle and other late Writers - Thus we conclude the consideration of the Class of Pyrexia - We have touched the prin-cipal objects of the practice of Physic; yet much still remains, but I will treat it as completely as I can.

Cl.

Cl. II. Neuroses.

This Term is new, but allowable, either in Language or propriety of Ideas - It comprehends those diseases which are properly diseases of the Nervous System - Its Character is "Sensus et motus laesi". But if this were the whole of it, it would comprehend all diseases whatever - Therefore, to limit it, we have added "sine Pyrexia et sine morbo locali". or rather "sine Vitio Organico". *. The meaning of this is, that the Nervous power acts by the Intervention of Organs, on the state of which sometimes the Interruption of the nervous power may depend - Those Cases we exclude - And further we confine it to the diseases of the nervous power, "sine pyrexia". That is to say, that this Class comprehends none of those diseases, of which the chief affection is in the hydraulic System - I have here omitted "sine pyrexia Idiopathica".

As for the Orders, they may be divided into two heads,

1. From the weakness of the functions, we have Comata and Adynamiae -
2. From Irregularities in those functions, we have the Spasmi and Vesaniae -

These

These two subdivisions do not, however, in the after subdivisions proceed on the same plan - The Effects of weakness I divide into two Orders.

1. as they affect chiefly the animal Functions,
2. Or the vital and Natural Functions -

As for the Irregularities the affections of motion give, the Spasmi, those of sense the Vesaniæ - In all these you must understand me as speaking only of the chief affection - and so in the Order of Comata, the weakness affects chiefly the Animal Functions, but chiefly only, as the vital and Natural are affected also, but in a lesser Degree -

It would be useful to Compare this part of Nosology with that of other Systematics, as such Exercise is truely Pathological; but my time obliges me to refer this to yourselves -

Nervous affections have been confined by some, as Dr Whytt and others, to affections of the alimentary Canals, but improperly - and in the sense the Term is commonly used, it conveys no meaning at all - Having nothing to say on this Class, that will apply so generally as what was said on the subject of Pyrexia, I proceed to the consideration of the first Order

Or. 1. Com

Ord. 1. Comata — I have already given you the distinction of this Order – It is distinguished from Adanamiæ, because it affects chiefly the Voluntary motions – "Motus voluntarii imminutio" – I have added "cum sopore", a state which approaches, as nearly as we can define it, to natural Sleep — "sive Sensuum feriatione". – The word Sopor in Linnæus is too extensively applied, to every interruption of sense or motion in any particular part — Thus he defines Paralysis "Sopor constans partis alicujus" – I mean by sopor, that affection of the Sensorium by which all sensations and voluntary motions are interrupted.

With regard to the Genera, we have two heads of them, distinguished from the state of the muscles during the affection – Apoplexia and Paralysis constitute one, and Catalepsis the other – In the first subdivision there is a relaxation of the Muscles, though perhaps there is some con-traction of the antagonist-muscles, but not supported by the will – In the Catalepsis, on the contrary, the Con-tractions, formerly produced by the Will, remain; and if by external force the member be put in such a state as might be produced by voluntary Contractions, this immedi-ately takes place – With these Explanations I proceed to

G. XI. Apoplexia – This is distinguished from Paralysis chiefly by the universality of the affection – The

Pal.

Palsy is always a particular affection - If attended with sopor it runs into Apoplexy. - "Motus voluntarii fere omnes im"-minuti cum Sopore plus minus profundo." Sopor, then, constitutes the proper and Chief Character of apoplexy - It is often absent in Palsy; but never in apoplexy - Between natural sleep and the most profound Apoplectic Sopor, no certain bounds can be fixed, for making particular genera. In natural sleep the slightest Impressions are sufficient to excite and rouse some people; while others are not affected by very loud noise. In some cases of apoplexy the Sopor is so great that no means (in human power) can give Excite-ment. But we must not confine this to these Cases, as the Irritability of different people differs much in this respect - Some will be excited from sleep by a mouse, others not by Cannon, and therefore those differences of degree cannot constitute a difference of Genera - Therefore we include all slight de-grees of preternatural Sopor under Apoplexia, and we mark the genus by the highest extreme.

Here I suppose the Doctrine of the Nervous System generally understood - It is agreed, that there is a nervous power extending wherever the nervous system extends, and admitting of a free Communication with all its parts, which mobility is the foundation of many Phenomena of the Nerves —

2. That the nervous system is the means of supporting the functions of our System; and that it is funda-ment.

fundamentually preexisting to other parts.

3. That it is independant of other Functions, except in as far as it is connected with them from habit.

The Causes of Interrupted Sense and motion may be refered to three heads.

1. Those that more immediately affect the nervous power, as in the Case of many poisons.
2. Those that affect the organs most immediately connected with the Nervous power, viz, the Condition of the medullary state of the nervous system.
3. Those that tend to destroy other Functions of the System, necessary to support the nervous power.

I am to enquire into the Proximate Causes of Apoplexia, an important consideration, and which will also apply to other affections, such as Palsy, mania, &c. The general doctrine of the nervous system is here necessary, and supposed understood, especially the propositions mentioned at our Last meeting. From these we conclude that the Cause of diminution of Sense and motion, may be referred to three heads. Those that tend more directly and immediately to destroy the nervous power, Those affecting the nervous Organs, in which the nervous power more immediately resides. and those affecting the functions necessary to the support of the System.

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In defining Apoplexy, it was not enough to say that it affects the Voluntary motions; because this does not sufficiently distinguish it from affections of the Vital motions; and therefore Boerhaave properly added Superstite motu Cordis et Pulmonum. The Causes of apoplexy must be referred to one or other of the two first heads – With regard to the Organs of the nervous power, we have but an indistinct Idea of them:- we perceive only that Compression prevents the Communication between its parts, and consequently prevents motion. There are few fatal Apoplexies where we do not find, if allowed the Opportunity, a Cause of Compression of the brain. – This is the most frequent cause of apoplexia and mostly taken notice of – But what are the Causes and effects of Compression? – It may be referred to four heads,

1. From external violence, such as fractures of the Cranium, pressing it upon the brain – But this belongs to the Surgeons –
2. From certain Tumors within the Cranium, arising often to such a size as to induce a very general, or very extensive partial, Compression – I will not pretend to say what is the nature of such Tumors – Practical Writers having done nothing to explain their nature

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and Causes - I know of no case where these Tumors have discovered themselves, or, if suspected, from any external Symptom, of no remedies to cure them.

3. From over distension of the Vessels of the Brain, the fluids being still confined within their proper vessels - This this takes place we conclude from this, that when a person stoops forwards for a considerable time, there appears a swelling of the Jugular veins, redness of the face, and, upon raising up his head, a Vertigo, that person will be liable to Apoplexy - and if we consider that these often occur in persons manifestly Plethoric, and chiefly from Causes of accumulation in the head, we may understand how it may often arise to Apoplexy - I once had occasion to observe a person in whom a Steatome, or Tumor, ~~[illegible]~~ on the descending Cava, which determined more blood to the ascending, if he stooped his head forwards, had a Temporary, indeed, but perfect Apoplectic fit - In such Transitory Cases we must not suppose an Effusion, but an over distention of the vessels of the brain - But upon considering the subject, we are apt to think that over-distention as chiefly existing in the Large Vessels of the brain, and in such vessels the overdistention chiefly appears on dissection - But to me it

it seems impossible that those large vessels can be-come so turgid as to cause the Compression which is necessary to affect the origin of the Nerves - We know the Extremities of the arteries are situated near the origin of the Nerves, and there is here a se-cretion of the nutritious fluid from the arteries, in the medullary substance of the Nerves; but an accumu-lation of fluids in those Extreme vessels, will very readily affect the origin of the Nerves, so as to induce Apoplexia.

4. Of all Causes, we most commonly suspect that there is an Effusion of fluids in the Cranium - This is of two kinds - Sanguineous, or an Effusion of red blood, probably by rupture of the red vessels; or Serous, coming, as we suppose, from the Anastamoses of ar-teries and Veins, or Exhalent Vessels.

1. The red blood may be effused from Causes acting on the red vessels directly, so as to encrease the Im-petus of the blood in them, as in a fit of Anger, &c - Or whatever prevents the return of venous blood to the heart: This may produce Congestion, which may in-crease the stimulus, and bring on the Hemorrhagic effort - From External violence, Contusion, or even Concussion -

2. Increased Impetus, from Causes acting directly on the arteries themselves, may occasion Serous Effusions, as Angina, Phrenitis &c - Resistence to the return of venous blood from the brain; If the serous vessels easily give way, they will allow of this effusion, but pre-vent that of red blood - and by this means Serum may be accumulated in the brain - This may operate in two ways, either by the accumulation being in vessels that have no Valves, and occasioning a rupture in their Extremities or weaker parts - Thus this may occur from violent strains or Efforts - But it is probable that this may produce active hemorrhagy also, and that as in Hemorrhois the accumulation in the Extremities of the Veins induces an accumulation in the Extremities of the Arteries, in consequence of which the Exhalents are forced to expel their contents in greater quantity than usual - Or Resistence to the return of venous blood may also produce Serous Effusions in the Cavities of the brain in another way - The best Anatomists have not been able to demonstrate Lymphatics in the brain, though some have pretended - but it is by no means ascertained; but we know that Exhalation and even Effusion are carried off from the brain by absorption, which must therefore be done by the red Veins, or other absorbents

Analogous to the Lymphatics - If that absorption is dimi-nished a preternatural accumulation of Serum will ensue - as we know, therefore, that in other Cases, obstruction to the return of venous blood produces hydropic effusions, we ascribe it here,

1. To encreased action of the Exhalents -
2. To diminished absorption -
3. Serous effusions may be the Consequence of Laxity, and yielding of the Exhalents, such as frequently attend Intermittents, without any suspicion of venous obstruction - We know this to be the Case in the brain when it is attended with such other Effusions in the rest of the System -
4. From superabundance of serous fluid in the bloodvessels, such as attends Chlorosis and other Cases of Cachexia, whence this runs off in greater quantity from the Exhalents than in the natural state - There is a particular observation to be mentioned - apoplexy arises pretty frequently from Ischuria Renalis, and we have instances of the serum running off in these Cases by other Excretories, commonly the brain - Whence the most common Issue of Ischuria Renalis is Apoplexy -

From the whole of these Cases of Effusion in the brain, you see that preventing the return of blood is the most frequent Cause of them; and accordingly it is

is particularly to be Explained - I have frequently said how the Venous Plethora prevails in decline of life; and it is at this time that apoplexies chiefly occur - I have explained the Effects of that Plethora in the system of the Vena Portarum, which also frequently take place in the brain - You must Observe that the return of Venous blood from the Brain is different from that of other parts, and performed not by gradually encreasing Veins, but by Sinuses, into which the small veins empty themselves - Most Veins enter the Sinuses in a direction contrary to the blood's direction in these Sinuses, as is particularly the Case in the Longitudinal ones - and even when they seem to enter at right Angles, they are found to make in the Membrane a retrograde motion to enter in that manner -

Further, the assistance of Compression is wanting in the whole of the Brain - and even after the blood is out of the Cranium the Compression from muscular motion is inconsiderable, and fully as fit to retard as to promote the course of the blood - Besides this difficulty, we find that in the decline of Life that the action of the heart and Arteries is weaker - From the state of the brain at this period, an accumulation is now most liable to occur.

Those who have large heads and short necks are particularly liable to apoplexy, i.e. Where the vessels of the brain are larger than Common - The mere bending of

of the neck has an effect here, the greater as the neck is shorter; and accordingly it has sometimes been found on Dis-secting people who have died of apoplexy, that they wanted a Vertebra of the Neck -

From these Observations it appears, that in Apoplectic persons the head is particularly liable to accumulations in the venous System, and to have its venous blood pre-vented from returning to the heart - Whatever ob-structs the return of blood to the right Ventricle of the heart, such as a Polypus therein, has been found to induce apoplexy - But too much perhaps has been attributed to this Cause - Polypi do not occur so often by far as it is commonly imagined, and are not always found when suspected; and when they do occur, commonly many Circum-stances shew they did not exist previous to death, but are later Concretions - So that in forty Cases where this Cause is suspected, not above one is justly ascribed to Polypus

Further, whatever prevents the Circulation in the Lungs, may contribute also to induce apoplexy, by pre-venting the free return of blood - Experiments have been made upon animals (and Accidents have shewn the same in man), by taking off the Cranium to observe the condition of the brain - We have found that the Brain is liable to alternate rising and subsiding, not with the Contrac-

-tion

Contraction and dilatation of the heart, but Synchro-nous with Respiration - In time of Inspiration the brain tumifies, and vice versa *, and accumulation being then pro-duced in the Brain, which may occasion Effusion — And the whole Concurs in proving that Apoplexia may be owing to a plethoric state of the venous system of the Brain - You may observe in general that venous Plethora may operate in two ways,

1. In producing Hemorrhagy, or Hemorrhagic Efforts, by encreasing the action of the Arteries and urging the blood to their Extremities - This is confirmed by the account of the Connexion of the Vessels of the brain with those, and from the Lax situation of them, the blood is effused first from them, so as to make Epistaxis, and, if after fifty years of age, a very common prelude to Apoplexy, or Paralytic disorders

2. In producing an encreased Exhalation of Serum - These two Cases explain the Sanguineous and Serous Apoplexy, both arising from venous Congestion, and scarce to be distinguished from each other, as we have two Species of Apoplexy from effusion.

a. Apoplexia Hemorrhagia, from venous Congestion - And hence accumulation in the extreme arteries, Rupture, and effusion of red globules -

β Apoplexia Hydropica Habitualis; depends more upon

* I suspect I have made a mistake here, and that the brain Tumifies in time of the Expiration, and vice versa - B

the Laxity of the Exhalent Vessels - The former only is Idio-pathic, while the latter is not peculiar to the brain - Therefore Hoffman, with propriety has confined the whole of Apoplexies to Cases of Hemorrhagy in the brain.

I come now to the consideration of Causes of Causes acting on the Nervous power itself - Natural Sleep arises from such Causes, viz, the removal of Stimuli - I take it for Granted that the alternations of sleeping and Watching depend upon the Condition of the nervous System, its Excite-ment and Collapse; and whatever be the Causes of Col-lapse, it may rise to a morbid and fatal degree, such as from Cold &c - But these operate in a way not applica-ble to Apoplexy - Thus Electricity, Passions, both of the ac-tive and Sedative kind, &c - These do not apply to the case in hand; but I think it may be proved that they induce no Com-pression - The same may be said of the Apoplectic Collapse which follows Hysteric and Epileptic Paroxysms, and often attending Atonic Gout, where there is no suspicion of com-pression, but only of an atonia, which may easily be suppos-ed to extend to the Sensorium or Origin of the Nerves - This will be of use in the Practice - There is still another Cause of Apoplexy commonly referred to Compression.

I have been long Convinced, that our progress in Physic will always be proportionate to the progress we shall

shall make in Pathology of Diseases - It is sometimes Theory, but more often only an arrangement of Facts - I have taken some pains on the Pathology of apoplexy - The loss of motion which constitutes this disease, must depend on an affection of the Nervous System, i,e, on Causes directly affecting the nervous power; or on causes affecting the Organs of the nervous system - The consideration of the first is difficult, but in that of the other we perceive that Compression is often the Cause of apoplexy - Of all Cases of Compression I have given a full account - But when I had done so, I said it was probable that there were Causes of Apoplexy, which operated directly on the nervous power - Nothing is more evident than that the Causes of natural Sleep do not depend on Compression, and it is probable that the causes of natural sleep merely, may be in a morbid degree - There are other Causes inducing the same state of Apoplexy, though they are not causes of sleep - When a man takes in the Steams of fermenting Liquors, he falls into an Apoplectic State for many years, and afterwards recovers suddenly - It is here probable that the apoplexy was not induced by Compression - Other instances may be adduced of Apoplexy being brough on by powers which we strongly suspect to operate directly on the nervous energy, by taking off its mobility - Without giving any rationale or pretending to any Theory, we distinguish the mobility

of

of the nervous power from the want of it, by the words Excitement and Collapse -

There are other Causes of Apoplexy that are only Causes of Collapse, as often repeated fits of Epilepsy, or in Consequence of atonic Gout, and other Cases of Atony - I point out no more than a general Idea of the Existence of such Causes - Before I quit the subject I must observe, that a particular Case of Collapse is to be suspected - There are cases of apoplexy where, on dissection, inconsiderable Tumors and Partial Compressions have been found; and to such the disease is imputed - But often these Tumors and partial Compressions do not seem to be considerable enough to operate by Compression only - They extend but to a small part, and cannot be supposed to reach the Sensorium - There are few Cases of Compression considerable enough to affect the origin of the Nerves; and in many Cases, I say, it is very difficult to show how such Compressions can operate on the whole System - There is room, however, to suspect that a partial Compression may Cause a Regurgitation to the extreme Vessels, which may produce a general Collapse - This is often to be considered as an effect of Compression

Cure. I need not observe that this is frequently a fatal

a fatal disease, and therefore seldom Cured by Art - For this reason we should endeavour to prevent it, which is more practicable than to Cure - There are Causes in -deed, against which we have no defence - But if we are right in saying that a Venous Plethora is a most frequent Cause of it, there is no doubt that by a spare diet and very constant Exercise we may prevent it; in the same manner that Plethora, in other Parts of the body, is obviated - But as it attacks the strong and vi -gorous, who eat and drink plentifully, they will not be likely to follow such strict rules - If you tell a man of 25 that he has a great head and short neck, and there -fore disposed to apoplexy at 63.; not one in an hundred would regard such warning; and you will be laughed at till a nearer warning of the disease comes on - and then, when it is too late, they will call a Physician - By such apparent symptoms I have often seen and foretold apo -plexies - But though People will not be warned, yet even at last we must attempt a Cure, and there are Cases which are Curable - It is a common observation that apoplexy generally recurs three times before it proves fatal; and therefore it is possible, perhaps, to prevent its return from the first, or to render the succeeding more mild; for this observation is a general one, and not strictly true

true, though few survive the third fit.

Apoplexy may be referred to two Causes.

1. Compression, and

2. Collapse.

Again, those from the former may distinguish-ed into two Species,

α. Apoplexia Hemorrhagia, and

β. Apoplexia Hydropica.

And these require a Treatment somewhat different. There may also be an intermediate state between between these two, viz; where there is an hydropic state of the System, and may be Idiopathic, though I said that the former only could be Idiopathic. This intermediate state will be produced when there have been some Congestions, &c, but in a degree not sufficient to produce the Hydropic. The Treatment of this will be very nice. Congestions too, may occasion an Effusion of serum in the brain (being so inconsiderable to produce hemorrhagy) by encreasing the action of the arterial vessels.

With regard to the management of these two Extreme Cases (the medium being nice and difficult), the Cure of the Hemorrhagic Apoplexy depends upon Depletion, and in some measure on diminishing the Im

Impetus of the blood - This is to be done by Blood-letting and the Antiphlogistic Regimen. But there is scarce time for Regimen. Upon the management of Bleeding there have been some disputes, from the uncertainty of the disease being of this kind - Some perceiving that the disease often approaches to the hydropic kind, caution much against bleeding - I have this morning seen a new piece on this Subject, in which it is forbidden to take more than ℥viij of blood in any Case - I think, however that in Cases of Robust and Sangineous Constitutions, this is too small a quantity, and in some Cases two or three Pounds have been successfully taken away, though not all at one bleeding -

Arteriotomy has been strongly recommended in this Case, as a more certain means of Relaxation - This indeed would be true were the artery large; but as it is very small, and the blood often flows slowly from it, I am persuaded it is not so proper, and does not induce such a sudden relaxation as Opening the Jugular vein, or, if this be impossible, a consuel vessel at the arm - But what ever supposed advantages arteriotomy may have, I always leave it out in Practice, as it would deprive me of another Remedy, which is

Blis

Blisters, which are very useful, if we are per-suaded that the apoplexy is of the Hemorrhagic kind. All stimulants, except Blisters are carefully to be avoided, if we are satisfied of the necessity of Bleeding - But from confounding these two Cases of apoplexy Physici-ans have indiscriminately used Stimulants and Relax-ants - I am clear with Morgagni, that in the proper hemorrhagic apoplexy, all Stimulants, and even the Smelling Bottle so often used, are to be avoided. Blis-ters applied as near to the part affected as possible, are one of the first means of taking off the Inflamato-ry Spasm and Impetus - Their Stimulant power is always inconsiderable, and sometimes not sensible, and is abundantly compensated by the Evacuation and Relax-ation they produce - In Hemorrhagic apoplexies there is no hesitation about the use of blisters - and the nearer the part they are applied the greater their Effects -

The only Remedies that can diminish the Im-petus in hemorrhagic apoplexy, besides those mentioned, are Purgatives - These are employed to make a re-vulsion from the head; and it is necessary that we use the most acrid, which operate as a powerful means of relaxation - We are not here, as in inflamatory

Cases

Cases, to be afraid of their Stimulus; for it is not com-municated to the part affected, and if it were the Evacuation will more than Compensate for that Inconvenience by the Evacuation - If the Patient be in that state in which he can swallow nothing, we must content ourselves with Acrid Glisters - The writer I am now Speaking of properly proposes even ℥i or Tart Emet. in Glisters -

This is enough with regard to the Cure of the Hæ-morrhagic Apoplexy - Our ingenious Author, however, has proposed another remedy, viz, Ligatures on the Extremities - I have already spoken sufficiently of these on Hemorrhagies in general - They are indeed a Precarious and insignificant remedy - It is very nice and difficult to make a compression on the Veins and not on the arteries, and to compress the Veins so long without induc-ing regurgitation -

Apoplexia Hydropica. It is obvious that this will require a Treatment different from the other. Bleeding is here extremely improper, and also every thing that tends to weaken the Tone of the System - Blisters, if they could act as stimulants, would here be useful; but it is difficult to make a universal Stimulus suddenly, and blisters are insignificant - The chief thing to be employed is Purg-ing

Purging, and that too with the most acrid substances, as in all other hydropic Cases - Direct Stimuli, in cases where there is no serous effusion, might be thought proper - But they are insufficient to restore the Tone of the System, and I am persuaded, on the Contrary, they have done much mischief in many Cases of Compression - Yet I allow that Stimuli have often been found of Service - But this very fact only proves that there are other Apoplexies than those from Compression, viz, from Collapse - Of such Cases I have already given a general Idea - But except a few Cases, I am at a loss to distinguish those Causes of Apoplexy from Collapse. I shall say more of this on the Subject of Palsy, because we have there more time for our Practice - In Cases of Apoplexy from this Cause it is difficult to distinguish the proper Stimulus to be employed.

Gen. XLI. Paralysis.

In a Manuscript on Nosology given two years ago, I put Paralysis among the Adynamiæ - But whoever has a notion of method, may easily see that it has more affinity to Comata, as affecting the Voluntary motions, and not the natural or vital. I have defined Palsy by a partial loss of voluntary motion: "Mo

"Motus voluntarii nonnulli tantum imminuti, saepe cum "sopore." - But you must always in every Genus take the Cha-racter of the Order along with that of the Genus - Here "sine "morbo locali" excludes any fault of Organization in the part itself, as a cut Tendon, muscle, nerve, &c - Noso-logists have distinguished many genera by the degree of affection, and thus have made an Hemiplegia, Paraple-gia, &c. - But at most this can give Species, and not Ge-nera - Therefore Boerhaave, Hoffman, and other Syste-matics have agreed in considering the Genus of Palsy as comprehending all these -

Palsy is distinguished from its kindred disease, apoplexy, by the partiality of the affection in this, and universality in that - But in many Cases the disease comes on as a Complete apoplexy, gradually changing to Hemiplegia, Paraplegia &ca - In short, when there is still a voluntary motion in many parts, every body would call this a Palsy; but if you choose to call it Apo-plexy you are in no great error - I have not com-prehended here loss of Sense, because it is a rare occur-rence, and by no means necessary to form the Character. But if there is a loss of sense in any Case, there is also a loss of motion; and I would say it is a mere accident, un-common, and depending rather on loss of Circulation than

than on any affection of the Nerves - If there be in any case a loss of both sense and motion, I conclude that it is a Palsy in a higher degree, or a concurrence of some other disease - I do not remember ever to have seen an instance of loss of sense without loss of circulation.

A Gentleman was affected with an entire loss of motion in one, but the sense and Pulse remained full and strong - The other arm was also affected with a loss of sense, but was extremely cold, and had no Pulsation - at the beginning of Palsy this is by no means a common appearance - Nature has provided a net-work of arteries every where, giving the tension necessary to sensibility. If this tension be withdrawn, the sensibility is lost, though the Nerve itself is not affected - I do not remember a loss of sense without loss of Circulation - A difficulty has occured in refering Palsy to Compression, as in many Cases we must - Why, since the Nerves of sence and motion are not different, as you may see in Haller, is motion only affected and not sense? Whether the Nerves of sense are taken from both Hemispheres of the brain, and not those of motion, I will not pretend to determine. Whether less force is necessary for sense than for motion? this is probable, but not proved.

I have only one other Observation on Palsy - It is that I don't mean to Comprehend here all degrees of lost motion, between mere debility and Fatigue and entire loss of motion, but only entire loss of motion, at least from the will - all other less degrees we would put under the name of atonia in the same Genus. But this is so difficult that we have left it out of the System altogather - In many other respects our System is and must be imperfect - The Genus of atonia of Linnæus means only loss of muscular motion. I have added as Synonimies Tremor and Beriberia, merely to say that they belong more properly to Palsy than to the Order of Spasmi, as in other Systems.

Having now defined and limited the Genus of Paralysis, we come to its Causes - From what we formerly said of the Loss of Sense and motion in apoplexy, we conclude that Palsy may also be referred to two heads

1. Compression, and
2. Collapse -

The Theory of the former is the same here as in apoplexy, and its Causes must be understood in the same manner - Paralysis occurs at the same period of Life, and in the same Temperaments and Constitutions as apoplexy; and is also accompanied and preceeded by

by the same Symptoms of Plethora, especially venous plethora in the head - The affinity between the two diseases is fully established by this, that Hemiplegia, the most common palsy, begins with apoplectic Symptoms, and where it proves fatal it is with the return of those Symptoms - Therefore all we have said of Compression in apoplexy is truly appliable here.

With regard to that kind of Paralysis which depends upon Collapse, we are as much at a loss here as in accounting for apoplexy from the same Cause; but the same arguments we employed to prove the existence of such causes in apoplexy, apply here, but more distinctly and clearly - Thus, this disease arises from the fumes of Lead, Mercury, &c, Fermenting Liquors, Mephetic air, Vapours of New Plaistered Walls, &c - In all which cases of Palsy there is no suspicion of Compression - In many other Cases, where from the nature of the Causes we may conclude that there is some Compression, we suspect it is not adequate to the disease - But when the Causes are not external and evident we have no Data to discover them. When Palsy begins with Apoplectic Symptoms, there is

often

often little doubt of Compression; but when the Palsy subsists for several years, as is frequently the Case, there is a difficulty; for we cannot suppose the Compression which first brought on the disease continues during this time — If Congestion were the Cause, we cannot conceive how it should subsist just in the same state, so as to affect one part of the brain only; and frequently one side only seems to be affected — It is as difficult even to imagine an Effusion for so long a time, without any other effect. Hence we may presume, that when the Compression is to be supposed removed, the disease remains in Con-sequence of the Collapse induced by it — In many cases I cannot see the Causes of Collapse, and in many others I cannot distinguish their modus operandi. But it is sufficient for the method of Cure that we distinguish Cases of Collapse from Cases of Compression. This is difficult, but we must try it.

1. The existence of Collapse may be presumed when there is not general or Partial Plethora — I have hitherto put Palsy and apoplexy as depending on a venous Plethora: but it depends on arterial Plethora also — In young persons when the arterial Plethora, tending to Epistaxis, fails to induce this Epistaxis, it is determined to

to the head, and there produces an Effusion – Of which you will find eight or ten Examples in M. Lieutaud's historia Anatomica, that proved mortal, otherwise they could not have been there, and all marked with an Effusion of blood in the Encephalon – a Boy of 14 years of age, subject to Epistaxis, died at last of apoplexy; and on dissection an Effusion was found in the Encephalon – This is directly to our purpose.

But at 35, when the arterial Plethora ceases, and when the venous is not yet formed to any considerable degree, as before 50; – and when at the time there are no other marks of a general Plethora, large head, shortneck, suppression of Hemorrhoids, nor any other Evacuation, nor signs of Congestion, there is great presumption of Collapse – However, I formerly mentioned Tumors, as a Cause of Compression, in the Encephalon – These Tumors may be suspected in those Cases, and we have no certain Symptoms by which we can exclude them, because they often rise gradually without giving any previous notice – But though we cannot in such cases be certain, yet there are symptoms by which we can form a Probable Conjecture. Such internal Tumors, without previous Headach, Epilepsy, Mania, loss of motion, or of one or more of the senses, are rare, more specially if excited by fulness – These

symptoms

Symptoms indicate a Topical affection of the brain chiefly when they arise to Epilepsy; and we may then suppose a Compression - When a man in Consequence of occasional and Transitory turgescence, as from a hot Chamber, warm bathing, Anger, &c, has those Symptoms, we may suppose those Tumors Exist - In other Cases we presume there is a Collapse, and that no Tumors are present - We must also attend to Previous Symptoms of Dropsy, Ischuria, Cachexia, &c, or any other signs of Effusion; from the absence of which we also conclude for Collapse - When a Palsy continues a Considerable time without variation, and without marks of Turgescence, I would also conclude for Collaps, though Plethoric Symptoms and pretty strong evidence of Compression should have appeared in the beginning of the disease, and whatever might have been its first Cause - If it be owing to an Effusion of Serum, I can conceive that it may make a partial Compression which may continue for a considerable time without variation, and without acquiring an acrimonious state, all air being excluded; but is very unlikely that the ballance should be kept up so exactly, as now the Exhalents pour out more than a natural quantity, and require that the Inhalents should

should take up an equal quantity more than usual - If you consult Wepfer, de morbibus Capitis, Observation 32. you will there find a Case of Apoplexy, which varied singularly every day - He concludes there was certainly Plethora and Congestion in that Case - Upon the whole, if Palsy remains long, I should suppose that the Causes of Compression are removed, and the disease subsists by Collapse -

But there may be an ambiguity, were we cannot well explain the Causes of the variation, as in Cases of Change in the Circulatory System; - for a state of Collapse may vary - But when the disease is from this Cause the appearances are usually steady - Therefore, I say, in Cases of uniform and constant Palsy we have a Presumption of Collapse - When the original Compression has a great effect on the Sensorium and Intellects, inducing Fatuity, Oblivion, &c - as long as these remain we cannot suppose the Compression to be removed; but when these effects are removed, or if the Memory, at least of things, if not of names, is restored; I think it amounts to a demonstration that the first Compression is entirely removed also, and that

Col.

Collapse has supervened - But the Conclusion to Plethora, from Palsy beginning by apoplexy, is not so certain; as we have seen that there are Cases of Apoplexy from Collapse - When the caus-es of Collapse have preceeded, the Case is clear - Diemerbroek mentions a young Girl, who from sud-den Terror and fear was affected with Palsy, first near a paraplegia, and then subsisting thirty years in the lower Extremeties; but was at last suddenly Cure by a Flash of Lightening - I think it would be hard here to suppose that the Cause of the remov-al could so suddenly remove a Congestion - after this distinction of the Cases, I proceed to the

Cure - This will turn very much upon our being able to discover when the disease is owing to Compression and when to Collapse -

1. When we can presume that Palsy has succeeded apoplexia hemorrhagia, the only means of Cure to be depended upon, so long as it continues in that State, are Bleeding, Blistering, and Purg-ing, as in Apoplexy, - But that apoplectic state does not continue long; and when the Palsy in

the

the Condition of Hemiplegia subsists, with marks of Compression removed, one of two things is to be presumed - Either,

α. That there is an Effusion remaining, - or

β. That it is now a Case of Collapse -

If it be an Effusion, as red Effusions cannot subsist long without inducing Death, it must be a serous one - We cannot, I think, insist longer upon Bleeding, which cannot now take of the Congestion, and by weakening the Tone of the Exhalents and Inhalents, must prove pernicious. The Remedies now are Purging, Blistering, and Issues —

Stimulants are not altogather useless, but as the Collapse is the Reliquiæ of Compression, they are not to be used without Caution, as we cannot be certain now far the Plethoric state which first gave rise to the disease, may be induced. The Stimulants I would use are Exercise and Friction - Gestation is particularly useful - And to a degree as great as the Patient can bear - and some steady Evacuants are necessary to prevent a return of the Plethora, either general or partial, which is our chief Indication; and for this purpose employ Exercise -

B.

B. In Cases of more pure Collapse, Stimuli are to be em-ployed, and every Evacution to be avoided - Internal Sti-muli vary much - Volatile alkali is the best and soonest diffused over the whole System, but it is very transitory, because of its volatility, and from its being alkaline, as it is soon Neutralized in the Stomach: and a stimulus cannot be made to apply to the System in general in a Considerable degree - Therefore in a lasting and steady Palsy, though purely from Collapse, the Volatile alkali cannot, from its nature be long em-ployed - The Effects of such a transitory stimulus are very slow, and there is danger of destroying the Constitution, by neutralizing the acid of the Stomach, which may induce considerable Changes in the System - I have employed it often, and sometimes with effect; and in recent Cases it may be useful; but in others, where its constant use is necessary, there is danger of its bringing on topical Inflamatory disorders - Though I am not quite of Dr Huxhams opinion of this alkali, of its bringing on a State of Putrefaction of the blood; - yet it will destroy the acid which should prevent the blood from Putrifying.

Next to the Volatile alkali Aromatics may be useful; but these are less powerful and safe, as they are liable to bring on Inflamation of the

part -

As there is a loss of Tone, Tonics might be supposed useful, but I can say from Observation and Experience, that they are useless and dangerous * - as Bitters, which are commonly Employed, tend, by their narco-tic power, from long use, to destroy the tone of the System.

As Palsy is an affection of the head it is fre-quently attended with Epilepsy. On this account Physi-cians have often employed Antispasmodics, such as Fœtids - But I have never seen any sensible advantage from them, as they afford no good stimulus.

Acrids, taken from the Class of Tetradynamia, and Allia propagate their stimulus soon, and sometimes effectually - But it is very transitory, and if they be useful their Effects are rather to be attributed to their being Diuretics, and capable of supporting Perspiration; from which they may be useful in Cases of Palsy from a Plethoric state liable to return - Mustard, however, ought to be used in that state in which it is brought to the Table; for when new made it is a

disagree

* The loss of tone here is a Consequence, not a Cause - a state of Laxity may affect the nervous energy; but here the defect in nervous energy is the primary disease, and by inducing debility, diminishes the force of the Circulation, and thereby destroys the Tension of the parts. B.

disagreeable bitter, and but little acrid - Little, then, is to be expected from internal Stimulants in steady Palsies -

External Stimulants are more powerful, such as acids, Unguentum Paralyticum, alkalies, Volatile Oils, Neutral Salts: and strong Brine I have seen useful in the Cure of a Chronic Rheumatism - all the acrids stimulate and inflame the part - Acids on this account must be enclosed in oil, but even then they are liable to produce Inflamation; as are also alkaline Salts, if carried to a considerable degree - The use of the Neutral is but little known. Mustard, after fermentation, is so acrid as to induce Inflamation, and stimulates to a greater degree than Cantharides on the Surface, and is perhaps the most Efficacious Stimulant that can be employed - It is to used alone, and then it operates very quick; therefore it should never be suffered to remain long, but be often changed, to avoid Inflamation - All these External Stimuli are much better for topical Stimuli than for more universal ones, and should be applied to the Leg or Arm affected, but never to the head. -

We were treating of the Cure of Palsy from pure Collapse— What is the State of the nervous System under Collapse, we do not well understand; but we know that it is to be cured by Stimuli— We have examined internal Stimuli, and the External from topical applications— There remain some more general and therefore more powerful in this disease. Some we cannot apply to practice, as Passions of the Mind, which are out of our power; and if we could excite them, we can fix no bounds to the degree in which they may be produced. — I am here to speak of the Stimuli of heat and Electricity. I need not now consider the universal power of heat; that its Stimulus is constantly necessary to our System; &c— Many Palsies that prove fatal in Cold Climates would not in Warm— accordingly I am persuaded that it is hardly possible to avoid the bad effects of Palsies, except by retiring to Warmer Climates— We endeavour to supply this by Applications of heat, such as Warm Bathing. The dry heat of the Bagnio cannot be applied without affecting the respiration to a great degree— Warm bathing has therefore been applied to Palsy with great advantage, and is certainly fitted to cure this State of Collapse.

Its

Finis ——— —

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